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A T V I R A S D I A L O G A S – A T V I R A I P S I C H I A T R I J A I
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Lektoriai

Prof. Jaakko Seikkula (Jyvaskyla universitetas, Suomija). Jau 20 metų kaip prof. Jaakko Seikkula dirba tiek praktinį, tiek mokslinį darbą, metodo, kurį jis pavadino „Atviras dialogas“ srityje. Šiuo metu Atviro dialogo idėjos yra plačiai pasklidusios ne tik Skandinavijos kraštuose, bet ir Vokietijoje, JAV, Australijoje ir kt. Šio metodo esmė – atvira komunikacija su pacientu, kuris patiria sunkų psichikos sutrikimą, ir jo/s šeima. Metodo esmė neseniai buvo pateikta moksliniame straipsnyje, parengtame kartu su Dr. Mary Olson (JAV) ir prof. Douglas Ziedonis (JAV) „Pagrindiniai dialoginės praktikos, taikant atvirą dialogą elementai: tikslūs kriterijai“ (2014); šio straipsnio vertimas į lietuvių kalbą bus pateiktas konferencijos dalyviams.

Prof. Douglas M. Ziedonis, MD, MPH (Massachusetts Medicinos mokyklosPsichiatrijos padalinys; UMass-Memorial Medicinos centras, JAV). Tai tarptautiniu mastu pripažįstamas lyderis nagrinėjant psichikos ir priklausomybės ligų komorbidiškumą. Naujosios laisvės Psichikos sveikatoje komisijoje (New Freedom Commissionon Mental Health) jis buvo prezidento Bush‘opatarėjas; be to, kaip patarėjas dalyvauja visos eilės organizacijų(SAMHSA, NIDA, NIMH, VA Health Care, APA ir t.t.) veikloje.

Dr. Sandra Steingard yra Howard’o centro Burlingtone (Vermontas, JAV) direktorė medicinai. Ji taip pat yra Vermonto Medicinos koledžo docentė. Pastaruosius 20 savo klinikinės praktikos metų ji pagrinde domėjosi pacientais, sergančiais šizofrenija ir kitais psichoziniais sutrikimais. Ji taip pat buvo nominuota Geriausio Amerikos gydytojo vardui gauti. „ Pastaraisiais metais aš pagrinde domėjausi dviem sritimis: vaistų, kuriuos aš skiriu efektyvumas ir saugumas bei taip vadinami „alternatyvūs metodai“ (Atviras dialogas, Balsus girdinčiųjų judėjimas ir t. t. Aš taip pat domiuosi, kaip mes galime pagerinti psichikos sveikatos priežiūros sistemą. Man įdomu, kur ir kaip psichiatrai „tinka“ reformuotai sistemai. Pastaruoju metu šiai profesijai skiriama daug kritikos. Yra tikras iššūkis lavinti jaunus žmones šioje srityje, suteikiant jiems reikiamas profesines žinias ir kartu jiems įskiepijant kritišką savo profesijos ribų supratimą“.

Prof. Niels Buus yra Sidnėjaus (Australija) slaugos mokyklos Psichikos Sveikatos slaugos profesorius, o taip pat Šv. Vincento Privačioje ligoninėje Sidnėjuje jis vadovauja Šeima pagrįstos psichikos Sveikatos priežiūros centrui. Jo mokslinio susidomėjimo sfera yra savižudybių prevencija, į sveikatą orientuotų psichikos Sveikatos priežiūros modelių kūrimas ir t.t. Jis aktyviai dalyvauja kuriant podiplomines studijųprogramas psichikos Sveikatos slaugytojoms. Jis yra asocijuotas redaktorius žurnaluose “Sveikata: Interdisciplininis Žurnalas Socialiniams Sveikatos, Ligos ir Medicinos Tyrimams” (“Health: An Interdisciplinary Journal for the Social Study ofHealth, Illness and Medicine”) ir “Tarptautiniame Slaugos Tyrimų Žurnale” ("International Journal of Nursing Studies"). Jo daktaro disertacijos tema buvo kultūra ir kalba, kurią naudoja psichikos sveikatos slaugytojos. Šia tema profesorius Niels Buus ir skaitys pranešimą.

Praktinė informacija:

Registracijos pradžia 9:00. Konferencijos pradžia 10:00.
Bus išduodami universitetiniai 8 valandų kvalifikacijos tobulinimo sertifikatai.
Renginys skirtas gydytojams psichiatrams, psichoterapeutams, kitų specialybių gydytojams, psichologams, socialiniams darbuotojams, meno terapeutams, slaugytojams.
Renginyje dalyvaus kolegos iš Latvijos, Lenkijos, Vokietijos, JAV, Skandinavijos kraštų, Didžiosios Britanijos.
Konferencija vyks lietuvių ir anglų kalbomis. Bus sinchroninis vertimas.

Detali informacija apie renginį ir registracija tinklalapyje
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BIOLOGINĖ PSICHIATRIJA
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PUSLAPIS INTERNETE http://biological-psychiatry.eu

CONTENTS
TURINYS

"Stress is the trash of modern life – we all generate it but if you don't dispose of it properly, it will pile up and overtake your life". Terri Guillemet (quotation anthologist)

Dear Colleagues,

Despite the fact that anxiety is a normal emotion that is experienced by everyone at some time in their lives, as a response to stressful life events it could become a serious health problem that reduces the quality of life. Anxiety disorders belong to the most common psychiatric disorders in the world. However, many patients who might benefit from psychiatric treatment are not diagnosed or not treated. The discussion about the diagnosis and treatment of problems in patients with anxiety and stressor-related disorders started among health care professionals from the Baltic countries at the beginning of May during the International conference "Anxiety and Stressor-Related Disorders: from Diagnostic Challenge to Evidence-Based Treatment" in Kaunas, organized by Lithuanian Society of Biological Psychiatry (LSBP) and Psychiatry Clinic at Lithuanian University of Health Sciences (LUHS). The plenary speaker of the Conference, prof. Joseph Zohar from Tel Aviv University, Israel, presented a European College of Neuropsychopharmacology (ECNP) supported talk "How Neuroscience based Nomenclature (NbN) can help in Rational Prescribing?". This new nomenclature of psychotropic drugs reflects the current knowledge and understanding about the targeted neurotransmitter system being modified and the mode of action. The problem of comorbidity of anxiety and alcohol related disorders was discussed by Prof. Cor de Jong from Nijmegen Institute for Scientist-Practitioners in Addiction, Netherlands in his presentation "Tell me why: the biopsychosocial model for addiction revised". Lithuanian health care issues in suicide prevention were analyzed by Ona Davidoniene, the director of State mental health care center, during her talk "Stressor-related Disorders as Risk Factors for Suicidal Behavior". The treatment challenges of anxiety disorders in general practice were analyzed by prof. Virginija Adomaitiene from Psychiatry Clinic at LUHS. During the conference the evidence-based pharmacological treatment guidelines and cognitive therapy interventions in management of anxiety disorders were presented by dr.Vesta Steibliene and dr. Julius Neverauskas. Most of the topics in the presentations of junior scientists during the Conference addressed anxiety disorders in general medicine.

This spring issue of "Biological psychiatry and Psychopharmacology", in which a lot of space is devoted to the theme of anxiety symptoms, may be the natural evolution of this topic.

In this issue Jonauske & Steibliene discussed the role of physical attractiveness nowadays, the growing dissatisfaction of people with their appearance that leads to rapidly rising amount of interventional cosmetic procedures. Authors presented their original research about the links between concerns about physical appearance and anxiety and depression symptom severity among subjects who received minimally invasive injectable cosmetic procedures. This study found that women, but not men, who were admitted for minimally invasive cosmetic procedures experienced higher severity of symptoms of body dysmorphic disorder in relation with higher anxiety and depressive severity of symptoms. This study is indicating the importance of evaluation and management of psychiatric symptoms among women seeking-out minimally invasive cosmetic procedures.

The next topic addressing anxiety was presented by Bunevicius and his colleagues about the association of vulnerability to stress with academic achievements of medical students and with response of cardiovascular system to an oral exam induced stress. Authors concluded that grades were significantly lower among student having medium vulnerability to stress when compared with students having low vulnerability to stress. Oral examination was associated with significant elevation of blood pressure and heart ratio, suggesting that examination should be considered an important stressor at medical schools that have a propensity to elicit physiologic responses.

Sapezinskiene and Soroka reviewed Dance and movement therapy (DMT) as a creative method to help people who can be hardly treated using verbal, counseling and psychotherapeutic measures, or when such measures are not satisfactory at all. Summarizing the results of scientific literature and their own experience working with disabled clients the authors have determined that modern DMT practice, based on various modern theories, holistically embracing the person's body and mental practical problems, is gaining self-methodological basis and aims to become one form of psychotherapy in Lithuania.

Lukošiutė and her colleagues discussed the controversial diagnosis of simple schizophrenia and presented a clinical case of a patient, which represents a patient's life and illness history, which revealed diagnostics and differential diagnostics complexity, treatment options and future prognosis.

In another case report, Sabaliauskaite and her colleagues described exogenous glucocorticoid induced psychiatric disorder. Delirium syndrome had developed in a patient without psychiatric symptoms before a kidney transplantation, who had been using glucocorticoids according to standard immunosuppression scheme. Authors suggested monitoring all of the patients who are using exogenous glucocorticoid for this adverse event.

In this issue we also presented a Lithuanian translation of the updated World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for the pharmacological treatment of anxiety disorders, obsessive – compulsive disorder and post-traumatic stress disorder with a special focus on diagnostics and treatment challenges in primary care. We want to thank Kristina Norvainyte, a medical student of Lithuanian University of Health sciences, for the assistance in translation of these Guidelines.

In this issue Musneckis and authors presented a Lithuanian translation of European Male Ageing Study Sexual Function Questionnaire (EMAS-SFQ). The permission to use this Questionnaire in research purposes had been obtained from their authors - Daryl B. and co-authors.

The editors of this journal want to congratulate readers with the beautiful beginning of summer and wish a pleasant reading experience.

Vesta Steiblienė, Field Editor, General Hospital Psychiatry

Links between concerns about physical appearance with anxiety and depressive symptoms in subjects seeking minimally – invasive injectable cosmetic procedures

Asmenų besikreipiančių injekcinėms estetinės medicinos procedūroms susirūpinimo fizine išvaizda sąsajos su nerimastingumo ir depresiškumo raiška

Renata JONAUSKE, Vesta STEIBLIENE

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SUMMARY

The aim of the study was to determine the links between concerns about physical appearance with anxiety/depression symptoms severity among subjects who received minimally – invasive injectable cosmetic procedures.

Methods. This study was performed at Azuolyno Medical SPA, Kaunas, Lithuania. All individuals consecutively admitted for minimally-invasive injectable cosmetic procedures were invited to participate in the study: the subjects' group – 100 participants (96 women and 4 men), 97 % of all invited; control group – 72 participants (67 women and 5 men) who received non-invasive beauty treatments. Prior to the procedures all study participants were invited to fill out the Cosmetic Procedures Screening Questionnaire (COPS), Hospital Anxiety and Depression scale (HAD) and sociodemographic questionnaire.

Results. Only 29% of study subjects were satisfied with their appearance, as opposed to 55.6% of controls (p=0.003). The comparison in the terms of Body Dysmorphic Disorder (BDD) symptoms showed that all 9 COPS items' mean scores were significant higher among subjects in comparison to controls. Only 4 women (4%) scored ≥ 40 on the COPS scale, which is strongly suggestive of a diagnosis of BDD; whilst there were no participants with possible BDD amongst controls (p>0.05). Subjects self-reported higher severity of anxiety symptoms on HAD-A total score in comparison to controls (6.52±3.53 vs. 3.42±2.48, respectively; p<0.001) and self-reported higher severity of depressive symptoms on HAD-D total score (2.38 ±2.51 vs. 1.08±1.78, respectively; p<0.001). Significant differences were determined in women, but not in men. The correlations between total BDD symptoms' severity and anxiety (r=0.447; p<0.001) and depressive symptoms (r=0.278; p=0.005) were evaluated among study group's participants. Women with results suggestive of a diagnosis of BDD have exhibited significant severity of anxiety and 50% of them – significant severity of depressive symptoms.

Conclusions. One third of subjects, especially women, admitted for minimally – invasive injectable cosmetic procedures were satisfied with their own appearance – a significantly lower proportion than subjects on non-invasive beauty treatment. Despite the insignificant part of subjects with suggestive BDD diagnosis, women admitted for minimally – invasive injectable cosmetic procedures had higher severity of BDD symptoms and anxiety/depressive symptoms. Furthermore, the links between increased concerns about physical appearance and greater severity of anxiety and depressive symptoms was observed only among subjects seeking minimally – invasive injectable cosmetic procedures. All women subjects with suggestive BDD have exhibited significant severity of anxiety and half of them – significant severity of depressive symptoms.

Keywords: anxiety, depressive symptoms, body dysmorphic disorder, cosmetic procedures

SANTRAUKA

Tyrimo tikslas: įvertinti asmenų besikreipiančių injekcinėms estetinės medicinos procedūroms susirūpinimo fizine išvaizda sąsajas su nerimastingumo ir depresiškumo raiška.

Metodai. Tyrimas buvo atliekamas Ąžuolyno Medicininiame SPA, Kaune, Lietuvoje. Visi pacientai atvykę minimaliai invazinėms injekcinėms procedūroms buvo pakviesti dalyvauti tyrime (sutiko 97 proc.) ir sudarė tiriamųjų grupę – 100 dalyvių (96 moterys, 4 vyrai). Į kontrolinę grupę įtraukti 72 asmenys (67 moterys, 5 vyrai), kuriems buvo atliekamos neinvazinės grožio procedūros. Visų tyrimo dalyviai užpildė sociodemografinį klausimyną, HAD klausimyną nerimastingumui, depresiškumui vertinti ir „Kūno dismorfijos vertinimo klausimyną" (COPS), kuriuo vertintas susirūpinimas fizine išvaizda/ dismorfijos išreikštumas.

Rezultatai. Reikšmingai mažesnė dalis tiriamosios grupės asmenų, ypač moterų, buvo patenkinti savo išvaizda, lyginant su kontroline grupe (29 proc. vs 55,6 proc., atitinkamai, p=0,003). Vertinant kūno dismorfijos simptomų išreikštumą nustatyta, kad visų devynių COPS atsakymų vidurkiai buvo reikšmingai aukštesni tiriamųjų grupėje lyginant su kontroline (p>0,05). Keturios moterys – (4%) tiriamųjų grupėje surinko COPS klausimyne ≥ 40 balų, kad rodo labai tikėtiną dismorfijos sutrikimą; tuo tarpu kontrolinėje grupėje tokių asmenų nebuvo (p>0,05). Tiriamųjų grupės asmenys sau priskyrė aukštesnius nerimastingumo balus HAD-A klausimyne lyginant su kontroline grupe (6,52±3,53 vs. 3,42±2,48; p<0,001) bei aukštesnius depresiškumo balus HAD-D total score (2,38 ±2,51 vs. 1,08±1,78; p<0,001); reikšmingi skirtumai nustatyti moterims, bet ne vyrams. Tiriamųjų grupėje nustatytos reikšmingos teigiamos koreliacijos tarp BDD simptomų sunkumo ir nerimastingumo (r=0,447; p<0.001) bei depresiškumo (r=0,278; p=0,005). Moterims kurioms tikėtinas kūno dismorfijos sutrikimas nustatyti reikšmingi nerimastingumo simptomai, o pusei jų – ir depresiškumo simptomai.

Išvados. Tik trečdalis asmenų, ypač moterų, kurioms buvo atliktos minimaliai invazinės injekcinės procedūros buvo patenkinti savo išvaizda- ženkliai mažiau nei atvykę neinvazinėms procedūroms. Nors galimai sergančių kūno dismorfinių sutrikimų dažnis tarp asmenų, kuriems atlikto minimaliai invazinės injekcinės procedūros nebuvo reikšmingas, tačiau kūno dismorfijos simptomų bei nerimastingumo/depresiškumo išreikštumas šios grupės moterims buvo ženkliai aukštesnis; jiems nustatytas tiesioginis ryšys tarp didesnio susirūpinimo savo kūno išvaizda bei padidėjusio nerimastingumo bei depresiškumo raiškos. Moterys, kurios galimai serga dismorfiniu sutrikimu turėjo reikšmingą nerimastingumą, o kas antra – reikšmingą depresiškumo lygį.

Raktažodžiai: kraujo spaudimas; egzaminas; širdies susitraukimų dažnis; stresas; medicinos studentai; polinkis stresui.

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INTRODUCTION

The wish to be beautiful and attractive is a normal desire. It is well known that physically attractive people are often perceived more favourably and experience significant advantages in employment and in other areas of life than those who are viewed as less physically attractive [1]. Whilst attractiveness plays a huge role in the whole world, the perception of beauty is often considered as quite subjective, varying between cultures, places and individuals. Time is also an important aspect in terms of the perception of beauty, given what was considered attractive few decades ago may not meet today's modern standards. One persistent factor in the concept of beauty is that a youthful face is full and balanced with the skin appearing free of wrinkles and being generally smooth [2].The unrestrained demand and rapidly rising number of cosmetic procedures (surgical and minimally invasive) is not surprising indeed. Total cosmetic procedures (surgical and minimally invasive) increased by 882% between 1992 and 2008, with over $10 billion spent on these procedures in 2008 [3]. Researchers have theorized two broad motives for endorsing cosmetic surgery: intrapersonal motives (e.g., wanting to feel better about oneself) and social motives (e.g., wanting to please one's partner) [4]. It is common for people to express dissatisfaction with their appearance to some degree from time to time, however not all seek to alter their looks or aging process with the help of aesthetic medicine or plastic surgery. Nowadays it is considered that minimally invasive treatments are becoming highly sought by those seeking a subtle, and importantly, less detectable uplift in their appearance. Most individuals seeking to look better appear psychologically healthy, however, some are not, and for these individuals cosmetic procedures may have a negative outcome, creating problems for both patient and surgeon [5-8].

Some individuals seeking out numerous cosmetic procedures and asking to "fix" their perceived flaws are obsessed over their appearance and body image, repeatedly checking the mirror, sometimes for many hours each day [9]. After their cosmetic procedures they may feel a temporary satisfaction, but often the anxiety about their appearance returns [10]. Body dysmorphic disorder (BDD) is a mental disorder in which subject can't stop thinking about one or more perceived defects or flaws in their appearance [11]. Individuals with BDD commonly seek out and receive cosmetic treatments to correct their perceived flaws in order to reduce body dissatisfaction, instead of psychiatric treatments [12, 13]. Comorbid psychiatric conditions may also develop: BDD was most common in patients with social phobia, obsessive-compulsive disorder and panic disorder [14]. The National Institute of Clinical Excellence (NICE) recommends screening patients for BDD prior the cosmetic surgery; however there are no evaluated recommendations for screening patients for BDD in cosmetic settings for those seeking non-surgical, also known as minimally-invasive, treatments [15].

We hypothesized that significant proportions of these individuals who seek non-surgical minimally invasive injectable treatments might express higher physical appearance concerns or possible diagnosis of Body Dysmorphic Disorder (BDD), leading to a significant severity of anxiety and depressive symptoms.

The aim of the study was to determine whether these subjects who choose minimally-invasive injectable cosmetic procedures appear to be more concerned of their body image and if there is a link between concerns about physical appearance with symptoms of anxiety and depression.

MATERIALS AND METHODS

Study population

This study was performed at "Azuolyno Medical SPA", Kaunas, Lithuania. This study and its consent procedures were approved by Bioethics Committee at Lithuanian University of Health Sciences (Permission No.: BEC-LSMU (R-20) on 04 of Feb, 2016). All individuals consecutively admitted for minimally- invasive injectable cosmetic procedures were invited to participate in the study. Of 103 invited individuals, 3 declined to participate, thus the study group comprised 100 participants (97 % of all invited): 96 women and 4 men, with a mean age of 37.5 ± 9.7 years old. The control group of 72 participants (67 women and 5 men; mean age 37.4 ± 11.1 years old) consisted of individuals who attended "Azuolyno Medical SPA" and received non-invasive beauty treatment.

Minimally-invasive injectable cosmetic procedures in this study comprised of: (a) Botulinum Toxin Type A injections for horizontal forehead lines, glabellar lines, lateral canthus lines or crow's feet; (b) Soft Tissue Fillers for the management of facial aging: correction of the face contour, treatment of nasolabial folds, drooping mouth corners, glabellar lines, lip shaping and augmentation; (c) Bio-revitalization of dermis with non-reticulated hyaluronic acid, (d) PRP (platelet rich plasma) injections (e) Intralipotherapy (Aqualyx), a treatment which removes localized adipose "fatty" tissue. Non-invasive beauty treatments in this study involved body or face massage, manicure, pedicure.

METHODS

All study participants before the procedures were invited to fill out the following standard questionnaires: Cosmetic Procedures Screening Questionnaire (COPS), Hospital Anxiety and Depression scale (HAD) and authors' designed short sociodemographic questionnaire.

The COPS is a self-report questionnaire designed to screen for symptoms of Body Dysmorphic Disorder (BDD) in cosmetic settings; however, the questionnaire can also be used as a measure of severity of BDD and may also be repeated during treatment and used in an outcomes' measure. COPS assessed the severity of 9 item constructs, rated from 0 (symptoms not present) to 8 (severe symptoms). Items 2, 3, and 5 are reverse scored. The total aggregate score is achieved by summing the 9 items giving a range from 0–72; where 72 indicates severe symptoms. COPS had an internal consistency of Cronbach's $\alpha = 0.91$with corrected item total ranging from 0.41 to 0.86. Area under ROC curve (AUC) for BDD patients was 0.905 (95% CI=0.862–0.948), a cut-off value of ≥40 resulted in maximal kappa coefficient (k=0.69, p <0.001) with specificity of 88.9% for BDD patients and 80.6% for the community group. Thus, COPS scores of 40 or above are strongly suggestive of a diagnosis of BDD [16].

The HAD scale is a self-reported instrument and consists of seven items for the evaluation of depressive symptoms and their severity (HAD-D) and seven items for anxiety symptoms and their severity (HAD-A) [17, 18].

Each item on the questionnaire is scored from 0–3 and resulting in an individual score of between 0 and 21 for both-anxiety or depression. Scores above 7 are felt to correlate with symptoms allowing classification as either mild (8–10), moderate (11–15), or severe (16–21). High correlation between HAD scores has been obtained in relation to other questionnaires and structured interviews detecting anxiety and depression [19]. The HAD uses a scale and therefore the data returned from the HAD is ordinal and has been extensively tested with regards to its well-established psychometric properties. Several studies have demonstrated good sensitivity, specificity, and receiver operating characteristics of HAD.

Our sociodemographic questionnaire consisted of four questions, 2 of which concern capture of demographic data from the respondents (age, gender), one question concerning their opinion on personal looks asking, "Are you satisfied with your current looks?" Respondents were asked to answer as either "Yes", "No" or "Partially". The final question aimed to clarify which, if any, minimally-invasive injectable cosmetic procedure the respondents were receiving, from the above list. Lip shaping/augmentation were excluded from soft tissue fillers as a separate subgroup as this procedure often is selected to address other issues than aging. Those in the control group were able to answer "no injectable procedure performed".

Statistical analysis

All continuous data are represented as means (SD, standard deviation); all categorical data as numbers and percent. Statistical analysis was started by assessment of normality of the data using Kolmogorov-Smirnov test; values of age and HAD scores showed a Gaussian distribution. Frequency rates are compared using chi-square test. To compare the means of variables, the independent t-test was used; to compare the variables among genders – non-parametric Mann-Whitney test was used. The correlation among variables was performed using Spearman correlation coefficient. A p-value of <0.05 was considered as statistically. All statistical analyses were performed using software from SPSS 22.0 for Windows.

RESULTS

As seen in Table 1, women made up the majority of subjects in both participant groups: 96 % among the subjects admitted for minimally invasive cosmetic procedures and 93.1% among non-invasive beauty treatments. This led us to believe that men were not an exception among subjects admitted for cosmetic procedures and therefore we have analyzed our data according the gender.

The comparison of the two groups did not reveal significant differences among study and control group participants according age and gender (p=0.302). The distribution amongst the minimally invasive procedures study group' participants favored Botulinum Toxin injections – 52 %, followed by Hyaluronic Acid fillers (crosslinked and non-cross linked) – 22%, Lip augmentation – 20 % and other procedures (PRP plasmolifting and intralipotherapy) – 6 %. Men also chose a variety of procedures, including Botulinum Toxin injections (2% of total respondents), Hyaluronic Acid fillers (1%) and others (1%).

It appeared that control group subjects were significantly more satisfied with their appearance as 55.6% of them answered 'yes' when asked to indicate if they were satisfied with their own appearance whereas only 29% were satisfied with own appearance in the minimally-invasive intervention sample; from study group 63% of respondents were partially happy with their own appearance in comparison to 40.3% subjects from control group (p = 0.003). The differences of satisfaction with the appearance determined in women (p=0.003), but not in men (p=0.487).

The comparison in terms of BDD symptoms between the groups, using COPS questionnaire, showed that all 9 COPS items' mean scores were significantly higher among study group participants in comparison to controls (Table 2). The higher COPS total score observed in our study group, compared with controls (19.54±9.69 vs. 9.35±5.52, respectively; $p<0.001$), was also statistically significant in women ($p < 0.001$), but not in men (p = 0.054). This supports a finding of significantly higher total severity of BDD symptoms among subjects admitted for minimally-invasive injectable cosmetic procedures.

The evaluation of prevalence of subjects with possible BBD diagnosis showed that 4 women in study group (4%) scored more than 40 on the COPS scale, which is strongly suggestive of diagnosis of BDD. Despite the fact that there were no participants with the COPS scores above 40 in control sample, the significant differences between the groups according prevalence of suggestive BDD were not found (p=0.111).

In terms of anxiety, subjects included into study group self-reported higher severity of anxiety symptoms on HAD-A

Table 1. **The socio-demographic characteristics of study participants**

		Study group, n=100	Control group, n=72	p
Gender, n (%)	Men	4 (4.0)	5 (6.9)	0.302
	Women	96 (96.0)	67(93.1)	
Age, mean ± SD		37.53±9.69	37.44±11.07	0.957
Minimally-invasive procedures, n (%)	Botulinum Toxin injections	52 (52.0)	0 (0.0)	n/a
	Hyaluronic Acid fillers(+Biorevitalisation)	22 (22.0)	0 (0.0)	
	Lip augmentation	20 (20.0)	0 (0.0)	
	Other (PRP and Intralipotherapy)	6 (6.0)	0 (0.0)	
Satisfaction with own appearance, n (%)	Yes	29 (29.0)	40 (55.6)	0.003
	No	8 (8.0)	3 (4.2)	
	Partially	63 (63.0)	29 (40.3)	

PRP, platelet rich plasma injections; SD, standard deviation

Table 2. **Severity of Body Dysmorphic Disorder symptoms and anxiety/ depressive symptoms severity between study group participants and controls**

	Study Group, n=100 (mean±SD)	Control Group, n=72 (mean±SD)	Student t-test, p
How often do you deliberately check your feature(s), score	3.36±1.99	1.64±1.43	<0.001
How much do you feel your feature(s) is currently ugly, unattractive or 'not right', score	2.84±1.54	1.67±1.38	<0.001
How much does your feature(s) currently cause you a lot of distress, score	2.59±1.71	1.25±1.40	<0,001
How often does your feature(s) currently lead you to avoid situations or activities, score	0.73±1.52	0.19±0.60	0.002
How much does your feature(s) currently preoccupy you, score	2.76±1.62	1.06±1.30	<0.001
How much does your feature(s) currently have an effect on your relationship with an existing partner, score	1.91±2.11	0.64±0,94	<0.001
How much does your feature(s) currently interfere with your ability to work or study, score	0.73±1.43	0.14±0.51	<0.001
How much does your feature(s) currently interfere with your social life, score	1.26±1.88	0.33±0.89	<0.001
How much do you feel your appearance is the most important aspect of who you are, score	3.36±2.41	2.43±2.03	0.007
COPS, total score	19.54±9.69	9.35±5.52	<0.001
HADS-A, total score	6.52 ±3.53	3.42±2.48	<0.001
HADS-D, total score	2.38± 2.51	1.08±1.78	<0.001

COPS, Cosmetic Procedures Screening Questionnaire; HADS-A, Hospital Anxiety and Depression scale, anxiety subscale; HADS-D, Hospital Anxiety and Depression scale, depression subscale; SD, standard deviation

total score in comparison to control group (6.52±3.53 vs. 3.42±2.48, respectively; p<0.001). Again, significant differences in HAD-A total score were determined in women (p < 0.001), but not in men (p = 0.181). Evaluation of prevalence of subjects with mild to severe anxiety symptoms revealed a significant higher prevalence of study group subjects with a significant level of anxiety symptoms (scored ≥8 on HAD-A) in comparison to controls (45.0% vs. 11.1%, respectively; p<0.001); again this preponderance for significant higher prevalence was also reported among women (p<0.001), but not among men (0.167).

The evaluation of self-reported depressive symptoms among study groups revealed significant higher severity of self-reported depressive symptoms on HAD-D total score in study group subjects than controls (2.38 ±2.51 vs. 1.08±1.78, respectively; p<0.001), significant differences in HAD-D total score were determined in women (p < 0.001), but not in men (p=0.723). The comparison of prevalence of subjects with self-reported significant depressive symptoms (scored ≥8 on HAD-D) between groups did not reveal significant differences (7.0% in study subjects vs. 1.4% in controls, p=0.083). All the subjects in both groups with self-reported significant depressive symptoms were women.

The significant correlations of BDD symptoms severity and severity of anxiety and depressive symptoms were evaluated among study groups' participants (Table 3).

Six out of nine BDD symptoms scores significantly positively correlate with severity of anxiety symptoms whilst

Table 3. **Significant correlations of COPS items scores and HADS-D and HADS-A subscales scores among study groups**

	HAD-D total score		HAD-A total score	
	Study gr., n=100	Control gr., n=72	Study gr., n=100	Control gr., n=72
How often do you deliberately check your feature(s)		0.347 p=0.003	0.230 p=0.021	0.359 p=0.002
How much do you feel your feature(s) is currently ugly, unattractive	0.236 p=0.018		0.408 p<0.001	
How much does your feature(s) currently cause you a lot of distress	0.264 p=0.008		0.429 p<0.001	
How often does your feature(s) currently lead you to avoid situations	0.261 p=0.009			
How much does your feature(s) currently preoccupy you			0.403 p<0.001	
How much does your feature(s) currently interfere with your ability to work or study	0.352 p<0.001	0.259 p=0.028	0.321 p<0.001	
How much does your feature(s) currently interfere with your social life	0.380 p<0.001		0.399 p<0.001	
COPS total score	0.278 p=0.005		0.447 p<0.001	

COPS, Cosmetic Procedures Screening p=0.005Questionnaire; HADS-A, Hospital Anxiety and Depression scale, anxiety subscale; HADS-D, Hospital Anxiety and Depression scale, depression subscale ; SD, standard deviation

Table 4. **Relations among significant severity of anxiety/ depressive symptoms and suggestive Body Dysmorphic Disorder symptoms among study group participants and controls**

	Study group, n=100			Control group, n=72		
	COPS <40 n=96	COPS ≥40 n=4	p	COPS <40 n=72	COPS ≥40 n=0	p
HADS-A<8	55 (57.3)	0 (0)	0.038	64 (88.9)	0	n/a
HADS-A≥8	41 (42.7)	4 (100)		8 (11.1)	0	
HADS-D<8	91 (4.8)	2 (50.0)	0.024	71 (98.6)	0	n/a
HADS-D≥8	5 (5.2)	2 (50.0)		1 (1.4)	0	

COPS, Cosmetic Procedures Screening Questionnaire; HADS-A, Hospital Anxiety and Depression scale, anxiety subscale; HADS-D, Hospital Anxiety and Depression scale, depression subscale

five BDD symptoms scores assessed the severity of depressive symptoms in our study cohort attending for minimally-invasive injectable cosmetic procedures. In contrast, only one BDD symptom significantly positively correlate with anxiety symptoms severity and two BDD symptoms with depressive symptoms severity were found amongst control participants. Significant positively correlations among total severity of BDD symptoms and anxiety symptoms severity ($r=0.447$; $p<0.001$) and depressive symptoms severity ($r=0.278$; $p=0.005$) were found in the study sample, but not in the control group.

The evaluation of mild to severe anxiety/depressive symptoms' prevalence among study subjects attending for minimally-invasive injectable cosmetic procedures, in relation to suggestive diagnosis of BDD demonstrated that all women (100%) with suggestive BDD (COPS≥40) have exhibited significant severity of anxiety and 50% of them significant severity of depressive symptoms, with significant differences compared with subjects without suggestive BDD (COPS<40) (Table 4).

DISCUSSION

The main finding of our study was the lack of a significant prevalence of assessment scores suggestive of a diagnosis of BDD among the subjects admitted for minimally-invasive injectable cosmetic procedures. It is important to consider that all subjects with suggestive BDD were women. Women, but not men, admitted for minimally-invasive injectable cosmetic procedures showed significant lower self-reported satisfaction with own appearance in comparison to subjects who received non- invasive beauty treatment, and also reported significantly higher level of BDD disorder' symptoms severity and anxiety and depressive symptoms severity. Overall, higher severity of BDD symptoms among subjects admitted for minimally-invasive injectable cosmetic procedures showed significant relations with higher level of anxiety and depression.

Our idea to evaluate the subjects admitted to minimally invasive cosmetic procedures evolved from data showing that minimally-invasive cosmetic procedures are becoming more popular every year, enhanced by the fact more people are able to afford them than previously [20]. After our literature review was conducted, we identified a lack of data looking at the psychology behind (the seeking of) these minimally-invasive procedures and the relationship with certain psychiatric symptoms and disorders. To our knowledge, there are no studies investigating body image disturbances in patients specifically attending for minimally-invasive procedures and this notable gap in the research literature may not only leave this population untreated, but also leave optimal treatment approaches undisclosed.

Despite BDD being a classified mental disorder, patients suffering from this condition usually seek non-psychiatric treatment. As such it is highly probable that BDD is often encountered primarily by dermatologists, aesthetic practitioners and plastic surgeons rather than mental health specialists and indeed a number of studies have investigated the rates of body dysmorphic disorder in patients attending cosmetic surgeons, with rates between 7 percent and 15 percent being reported [21-23].

A U.S study by Phillips and colleagues [24] assessed the non-psychiatric medical and surgical treatment sought and received by 289 individuals with diagnosis of BDD. Such treatment was sought by 76.4 percent and received by 66 percent of adults: dermatological treatments by 45.2 percent of adults, followed by surgery with 22.3 percent. These treatments rarely improved the symptoms of the disorder, indicating that majority of patients with the disorder who receive non-psychiatric treatment tend to respond poorly. Studies from psychiatric literature suggest patients with body dysmorphic disorder usually have a poor psychosocial outcome following cosmetic procedures and that on occasion a small minority of patients with the disorder may even become violent toward the treating surgeon or practitioner [24, 25].

Phillips et al. performed an analysis of depression, anxiety, anger and somatic symptoms in 75 consecutive outpatients with body dysmorphic disorder [26]. Similar to our results, in their study BDD subjects had significantly higher scores on the depression, anxiety, and anger/hostility scales in comparison to other psychiatric patients without BDD. The findings of Phillips et al. corresponds to the results of our study as scores of depressive, anxiety and anger-hostility symptoms severity scales were significantly positively correlated with BDD severity. It is interesting to mention that the scores of affective symptoms and scores of BDD symptoms severity significantly decreased after prescribing of antidepressant fluvoxamine, showing the effect of psychiatric treatment on BDD.

Another study by Phillips et al. [27] mentioned the importance of recognition of BDD in depressed patients, as missing this diagnosis can result in refractory BDD and depressive symptoms. The author also indicates that BDD may respond preferentially to treatment with selective serotonin-reuptake inhibitors (SSRI). It highlighted the difficulties in recognizing and diagnosing BDD in depressed patients due to underlying embarrassment and shame. Another study suggests that the SSRI antidepressant Citalopram appears not only a

safe and effective treatment option for BDD but also improves psychosocial functioning and quality of life [28]. CBT could also be a choice of therapy as it focuses on changing problematic thoughts and behaviours however most patients require once a week or more frequent sessions for about half a year in order to achieve results [29, 30].

In our study all subjects (namely women) who received minimally-invasive cosmetic procedures and presumably suffer from body dysmorphic disorder exhibited significant severity of anxiety symptoms. Furthermore, half of them experienced significant depressive symptoms suggesting overall that female gender could be a higher risk factor for BDD. This finding reaffirms the need for psychiatric input and treatment interventions in patients with a suggestive diagnosis of BDD.

In terms of limitations of our research, subjective valuation can pose a challenge. This results from patients being tempted to conceal their concerns regarding their appearance or body image. Furthermore the stigmatizing attitude towards psychiatric symptoms in the questionnaires was very obvious as many respondents asked if these questionnaires were capable of providing a psychiatric diagnosis for them. Taking these limitations into consideration, our research data focussed on the severity of psychiatric symptoms in patients seeking non-surgical, minimally-invasive injectable cosmetic procedures is nevertheless the first of its kind.

We would propose that further research is needed to assist aesthetic practitioners and aesthetic dermatologists in order to identify those individuals with higher risk for a poor outcome with minimally invasive procedures. It is also very important to be able to offer the appropriate help for those in need in order to address their mental health issues. Another relevant point for future research is the development of a short screening questionnaire designed especially for those seeking minimally invasive procedures that will assist aesthetic practitioners in selecting individuals who are likely to have a good outcome in psychological terms and direct those in need towards specialist mental health services.

CONCLUSIONS

The study determined only one third of subjects, especially women, admitted for minimally-invasive injectable cosmetic procedures were satisfied with their own appearance, this proportion was significantly lower in comparison to half of controls. Despite the insignificant part of study subjects with suggestive BDD diagnosis, the severity of BDD symptoms and anxiety/ depressive symptoms was significantly higher among women who received minimally-invasive injectable cosmetic procedures. The significant positive correlations showed the links between higher concerns about physical appearance with greater severity of anxiety/depressive symptoms in subjects seeking minimally-invasive injectable cosmetic procedures. All women with suggestive BDD have exhibited significant severity of anxiety and half of them significant severity of depressive symptoms.

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Vulnerability to stress, academic achievements and examination stress in medical students

Pažeidžiamumas stresui, akademiniai pasiekimai ir kardiovaskulinės sistemos atsakas egzamino metu tarp medicinos studentų

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SUMMARY

Objective. It is well-established that medical students experience high levels of stress during their training. However, studies evaluating vulnerability to stress as well as the impact of examination on cardiovascular system response are lacking.

Aim. To evaluate the association of vulnerability to stress with academic achievements of medical students and with response of cardiovascular system to an oral exam induced stress.

Methods. A total of 98 second year medical students (21 males and 77 females) were evaluated for vulnerability to stress using the Stress Vulnerability Scale (SVS) with greater scores indicating greater vulnerability to stress. Systolic blood pressure (SBP), diastolic blood pressure (DBP) and heart rate (HR) were measured in non-stress situation, 10 min. before and 10 min. after the oral examination. Grade average, grades of admission and grades of the examination were evaluated in all study participants.

Results. Medium vulnerability to stress students when compared to low vulnerability to stress students had significantly lower grades of admission, grade average (and grades of oral examination. A 2 (groups) × 3 (times) repeated measures ANOVA demonstrated significant time effect on SBP, DBP and HR (all p-values <0.001) during the examination. However, there were no significant interaction between time and vulnerability to stress on the change of the SBP, DBP and HR during the examination.

Conclusions. Higher vulnerability to stress is associated with lower academic achievements of medical students. Stress experienced during oral examination is associated with significant cardiovascular system response irrespective of vulnerability to stress. Interventions aiming to reduce vulnerability to stress can improve medical student academic performance.

Keywords: blood pressure; examination; heart rate; medical students; stress; vulnerability to stress.

SANTRAUKA

Įvadas. Yra nustatyta kad medicinos studijos yra susijusios su dideliu psichologiniu stresu tarp medicinos studentų. Tačiau iki šiol nėra atlikta tyrimų vertinančių pažeidžiamumo stresui ryšį su studentų akademiniais pasiekimais ir kardiovaskulinės sistemos atsaku žodinio egzamino metu.

Tyrimo tikslas. Nustatyti pažeidžiamumo stresui ryšį su studentų akademiniais pasiekimais ir kardiovaskulinės sistemos atsaku žodinio egzamino metu.

Tyrimo medžiaga ir metodai. Tyrimo imtį sudarė 98 (21 vaikinas ir 77 merginos) antro kurso medicinos fakulteto studentai. Visi tyrimo dalyviai užpildė Pažeidžiamumo stresui skalę (PSS). Sistolinis ir diastolinis kraujo spaudimas bei širdies susitraukimų dažnis buvo vertinti ne stresinės situacijos metu bei 10 minučių prieš ir 10 minučių po žodinio histologijos egzamino. Taip pat buvo vertinami studentų akademiniai pasiekimai: įstojimo į universitetą pažymys, pažymių universitete vidurkis ir histologijos egzamino pažymys.

Rezultatai. Įstojimo į universitetą pažymiai ir pažymių vidurkiai mokantis buvo susiję su mažesniais PSS balais (atitinkamai r=-0.365 ir r=-0.367, p=0.01). ANOVA analizė parodė, kad kraujo spaudimas (sistolinis ir diastolinis) bei širdies susitraukimų dažnis buvo didesni prieš egzaminą ir po egzamino lyginant su kraujo spaudimu ir širdies susitraukimų dažniu ne stresinės situacijos metu (p<0.001). Mes neradome ryšio tarp kardiovaskulinės sistemos atsako žodinio egzamino metu ir pažeidžiamumo stresui.

Išvados. Didesnis pažeidžiamumas stresui yra susijęs su blogesniais medicinos studentų akademiniais pasiekimais. Žodinio egzamino metu stebimas reikšmingas kardiovaskulinės sistemos atsakas, tačiau jis nėra susijęs su polinkiu stresui. Intervencijos mažinančios medicinos studentų pažeidžiamumą stresui gali pagerinti studentų akademinius pasiekimus bei pagerinti būsimų gydytojų sveikatą.

Raktažodžiai: kraujo spaudimas; egzaminas; širdies susitraukimų dažnis; stresas; medicinos studentai; polinkis stresui.

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INTRODUCTION

Studying at medical school is long, stressful and can cause significant psychological distress for future medical doctors [1, 2]. It is well known that high levels of chronic perceived stress might disrupt mental as well as physical health [3, 4]. Level of overall psychological distress is consistently higher in medical students when compared to the general population and to age-matched peers [2, 5]. Moreover, it is well known that physicians suffer more frequently from mental disorders when compared to the general population [6-8]. Therefore there is a growing interest in stressors involved in medical training. A number of stressors that medical students encounter during a training course at medical school have been identified, including academic pressure [9], high parental expectations, lack of time for entertainment, financial problems [10] and student abuse [11].

During a training process medical students have to take a number of tests and examinations. Examination is a real life stressor that might have numerous adverse health sequalae. For example, it has been shown that examination stress causes, activation of immune system [12] and hypothalamic-pituitary-adrenal axis, increased release of catecholamines [13] and hampering of cognitive functioning [14]. Catecholamines in turn activate cardiovascular system and cause increase in blood pressure (BP) and heart rate (HR) [15] Also, Mest and colleagues (1982) found increased levels of ThromboxaneB2 at the end of the examination in medical students suggesting that examination might increase risk of thrombotic disorders [16]. Long lasting mental stress also causes dysregulation of the immune function [17] that might lead to increased susceptibility to infectious diseases. However, studies investigating the impact of cardiovascular system response to examination induced stress in medical students are lacking.

High levels of perceived stress have negative influence on academic achievements of students [18] and this relationship is continuous during training years [19]. Low academic performance might add more pressure and distress for medical students and that in turn might increase the risk of stress related disorders. However, we did not find studies evaluating the effect of susceptibility to stress for academic performance and for cardiovascular system response to an exam induced stress in medical students.

Therefore the aims of this study were to evaluate the association of vulnerability to stress with academic achievements of medical students, and to evaluate the association of vulnerability to stress with response of cardiovascular system to an oral exam induced stress.

MATERIALS AND METHODS

Subjects

One hundred and fifty-one second year medical students of the Lithuanian University of Health Sciences, Faculty of Medicine, Kaunas, Lithuania, that took oral exam of Histology were invited to participate in the study. Ninety-eight students (response rate 65%) (21 males (21%) and 77 females (79%)) provided informed consent form and completed the study. The distribution in gender in a study group corresponded to distribution in gender in the Lithuanian University of Health Sciences. The mean age of students was 20±1 years.

METHODS

The study and its consent procedures were approved by the Institutional Biomedical Research Ethics Committee.

The study consisted of two phases. The first phase of the study was performed in a non-stress situation after regular didactic session of histology course one week before the examination. During this phase informed consent forms were obtained, students were asked to fill in the Stress Vulnerability Scale (SVS) [20] and measurements of systolic BP (SBP), diastolic BP (DBP) and HR were obtained. The second phase of the study was performed during the oral examination of histology. The oral examination of histology was chosen as naturalistic real life stress situation because previous studies have demonstrated that examination stress protocol and oral presentations are effective triggers of elevations in both psychological measures of stress and in cortisol levels [21, 22]. During the oral examination, all students had to speak with a professor on two randomly selected topics and were graded on a 10 point scale (range from 0 to 10) according on their performance with 10 being the highest grade. SBP, DBP and HR of each student that participated in the study were measured 10 minutes before the examination and 10 minutes after the examination. Grades of admission to the university (Gadmission), grades average while studying at the university (Gaverage) (range from 0 to 10) and grades of the histology examination (GHistology) were obtained from the Dean's office and were included in the analyses.

Vulnerability to stress was evaluated using Lithuanian version [5] of the Stress Vulnerability Scale (SVS) [20]. This questionnaire consists of 20 items with each item describing a factor that affects vulnerability to stress. Among those factors are eating and sleeping habits, caffeine and alcohol intake, expression of emotions and attitudes, and other factors. Each item is rated on a 5-point scale from 1 (always) to 5 (never) according to how much of the time the statement is true for the subject. Higher scores indicate higher vulnerability to stress. It has been suggested that score lower than 20 indicates low vulnerability stress, score from 20 to 50 indicates medium vulnerability to stress and score higher than 50 indicates high vulnerability to stress. The internal consistency of the SVS by the mean of Cronbach's coefficient alpha was 0.72 indicating that it is a reliable instrument.

SBP and DBP were measured with a random-zero sphygmomanometer. Systolic BP was measured as the point of appearance (phase I) of Korotkoff sounds; diastolic BP was measured as the point of disappearance (phase V) of Korotkoff sounds. HR was measured by palpating a radial artery for 60 seconds. Systolic BP, diastolic BP and HR in non-stress situation were measured after student was in a sitting position for 5 minutes.

Statistical analyses

All continuous data are presented as means ± standard deviations, all categorical data as number and percent. First, differences between male and female students at baseline were analyzed with independent t-test and chi-square tests.

Next, relationship between the vulnerability to stress and academic achievements of students was analyzed. Gadmission,

Gaverage and GHistology were compared of students who had low vulnerability to stress versus students who had medium vulnerability to stress using independent t-test. Pearson's correlation between Gadmission , Gaverage and GHistology versus scores that students received on the SVS was also calculated.

A 2 (groups) × 3 (times) repeated measures ANOVA was used to test for significant differences between SBP, DBP and HR between low vulnerability to stress students versus high vulnerability to stress students over time. In this analysis SBP, DBP and HR were chosen as within subject variables; and vulnerability to stress (low vs. medium) as between subject factor.

A probability level of $p<0.05$ was taken as significant. Statistical analyses were performed using Statistical Package for the Social Sciences 12.0 software package (SPSS Inc., Chicago, Illinois).

RESULTS

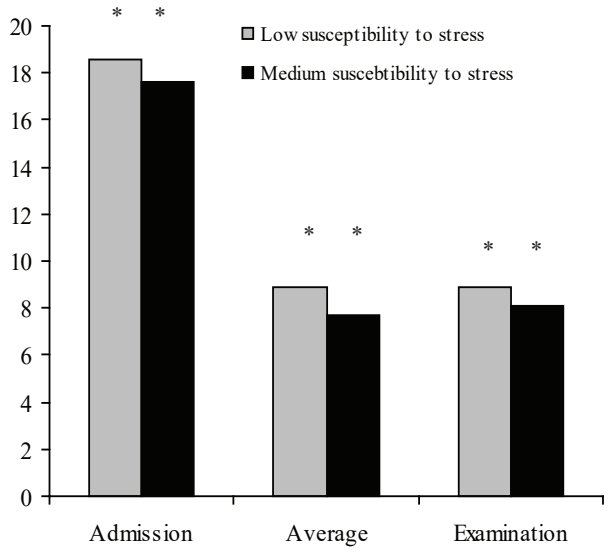
Seventy-seven (78%) students had medium vulnerability to stress (Table 1). There were no students who had high vulnerability to stress. Vulnerability to stress and studied grades were not different as a function of gender. SBP and DBP in non-stress situation were significantly higher in male students when compared to female students (131±13 mmHg and 117±10 mmHg, $p<0.001$, respectively; 80±9 mmHg and 75±8 mmHg, $p=0.011$, respectively).

Medium vulnerability to stress students when compared to low vulnerability to stress students had significantly lower Gadmission (17.6±0.9 and 18.6±0.9 points respectively, $p<0.001$), Gaverage (7.7±1.1 and 8.9±0.8 points respectively, $p<0.001$) and GHistology (8.1±1.2 and 8.9±1.1 points respectively, $p<0.01$) (Figure 1). There was a medium and negative correlation between scores on the SVS versus Gadmission and Gaverage ($r=-0.365$, $p=0.01$; $r=-0.367$ respectively, $p=0.01$). The correlation between the score on the SVS and GHistology was not significant.

Table 1. **The baseline characteristics of medical students. (Mean ± SD, n(%)).**

	Males 21 (21)	Females 77 (79)	p	Total 98 (100)
The Vulnerability to stress scale (SVS)				
Score on the SVS	28.7±7.6	26.6±8.7	0.31	21.0±8.5
Low vulnerability	3 (14)	18 (23)	0.55	21 (21)
Medium vulnerability	18 (86)	59 (77)	0.55	77 (79)
Grades				
Admission (points)	17.8±0.9	17.8±1.0	0.76	17.8±0.9
Average (points)	7.7±1.2	8.1±1.1	0.14	7.9±1.2
Index examination (points)	8.3±1.3	8.3±1.1	0.88	8.3±1.2
SBP, DPD and HR in non-stress situation				
SBP (mmHg)	131±13	117±10	**0.00**	120±12
DBP (mmHg)	80±9	75±8	**0.01**	76±9
HR (beats/min.)	76±11	80±14	0.23	79±14

Bold p<0.05
SBP – systolic blood pressure, DSP – diastolic blood pressure, HR – heart rate



* and * p<0.01

Figure 1. **Grades of admission to the university, grade average while studying at the university and grade of the examination when HR and BP were measures in students having low vulnerability to stress versus students having medium vulnerability to stress**

Table 2 presents SBP, DBP and HR data obtained during each of the three testing times (in non-stress situation, 10 minutes before examination and 10 minutes after the examination) in the low vulnerability to stress and medium vulnerability to stress groups. A significant time effect was noted on SBP, DBP and HR ($p<0.001$). SBP, DBP and HR of students was significantly higher 10 minutes before the examination when compared to SBP, DBP and HR in non-stress situation (129±12 mmHg and 120±12 mmHg, $p<0.001$; 84±8 mmHg and 76±9 mmHg, $p<0.001$; 85±14 beats/min. and 79±14 beats/min., $p<0.001$, respectively) (Figure 2). The SBP, DBP and HR of students was significantly higher 10 minutes after the examination when compared to SBP, DBP and HR in non-stress situation (130±12 mmHg and 120±12 mmHg, $p<0.001$; 84±9mmHg and 76±9 mmHg, $p<0.001$; 87±15 beats/min. and 79±14 beats/min., $p=0.004$, respectively). There were no significant differences in SBP, DBP and HR observed between the low vulnerability to stress and medium vulnerability to stress groups ($p=0.75$, $p=0.77$ and $p=0.87$, respectively) (Table 2). In addition there was no significant interaction between time and vulnerability to stress on the change of the SBP, DBP and HR ($p=0.88$, $p=0.55$ and $p=0.76$, respectively).

DISCUSSION

The main finding of our study is that higher vulnerability to stress of medical students was associated with lower academic achievements. Also, SBP, DBP and HR were significantly lower in non-stress situation when compared to an oral exam induced stress situation. However, change in SBP, DBP and

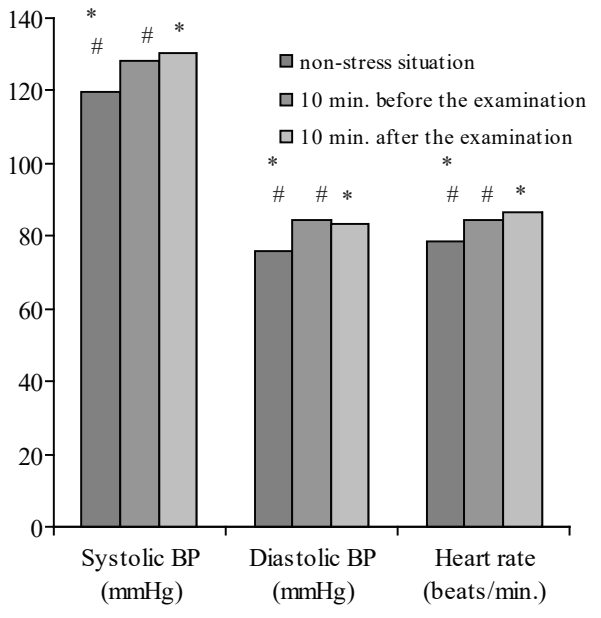
Table 2. **Systolic blood pressure (SBP), diastolic blood pressure (DBP) and heart rate (HR) of the low vulnerability to stress students and medium vulnerability to stress students**

Variable	Vulnerability to stress	Time			Significance (p)	
		Non-stress	10min before	10min after		
SBP (mmHg)	Low	121±12	128±14	131±13	time	**<0.001**
	Medium	120±12	129±11	130±12	group	0.75
					time×group	0.88
DBP (mmHg)	Low	77±8	83±8	83±10	time	**<0.001**
	Medium	76±9	84±8	84±9	group	0.77
					time×group	0.55
HR (beats/min.)	Low	80±13	82±13	87±12	time	**<0.001**
	Medium	78±14	85±14	86±16	group	0.87
					time×group	0.76

Bold p<0.05

HR was not associated with vulnerability to stress.

Higher levels of vulnerability to stress of medical students were found to be associated with lower grades of admission to the university, with lower grade average while studying at the university and with lower grade of examination. These findings are line previous studies demonstrating that unfavorable stress is associated with poor performance on written and oral examinations [18]. In addition, it has been shown that higher levels of stress and higher cortisol levels before the examination are associated with lower examination scores [23]. Moreover, a prospective study performed by Stewart and colleagues (1999) found that stress and its management has a predictive value on academic performance at medical school (but the predictive value of stress decreased once pre-medical school performance was statistically controlled) [19]. Other factors that have been shown to influence academic performance in medical school include academic performance at high school, personality traits [24], ethnicity and gender [25]. Academic performance at medical school is a strong predictor of success during a residency training and is considered important for residency program directors when choosing residents [26]. Therefore, vulnerability to stress should be considered during medical school training. Students with higher vulnerability to stress might be considered for stress management techniques since learning of stress coping strategies might not only improve academic achievements, but also might help to prevent development of stress related disorders, including substance abuse and suicide.



* and *; # and # p<0.05

Figure 2. **Systolic blood pressure (BP), diastolic BP and heart rate (HR) in non-stress, 10 minutes before the examination and 10 minutes after the examination**

We also found that a real life stress caused by oral examination was associated with significant increase in systolic BP, in diastolic BP and in HR. To the best of our knowledge this is the first study evaluating cardiovascular system induced stress in medical students. However, we did not find association between the change in physiological parameters of stress (BP and HR) and vulnerability to stress. Similarly, other studies have also found a significant increase in BP and HR 10 to 20 minutes prior to the examination when compared to BP and HR a few months prior the examination [27, 28]. Zeller and colleagues (2004) found a significant increase in DBP, but not in SBP, and significant decrease in HR before and after the examination [15]. Also, cortisol levels were found to significantly correlate with intensity and novelty of the examination [29] and with higher rated stress before the examination [23]. Vulnerability to stress was not associated with physiological measures of stress (BP and HR) in our study. This might be explained that other variables (such as coping styles and strategies, confidence, fear of public speaking, experience) that are considered important for individual stress reaction but were not investigated in our study could have influence this relationship

Seventy-nine percent of students had medium vulnerability

to stress. There were no students with high vulnerability to stress. These findings are consistent with results of a study by Saipanish (2003) who reported that 61% of Thai medical students had some degree of stress and 2% had high levels of stress [9]. It is well known that high levels of perceived stress are associated with symptoms of depression and anxiety and also predict risk for development of depressive disorder in different populations, including medical students [30]. Indeed, depressive disorders as well as anxiety disorders are more prevalent in population of medical students when compared to the general population and age-matched peers [2, 5]. Untreated mental disorders can significantly impair functioning and contribute towards higher risk of poor health outcomes, such a higher suicide rates [31]. Indeed it has been demonstrated that suicide rate is higher among physicians when compared to the general population [32]. Therefore timely recognition of risk factors for depression, including perceived stress, is essential in preventing depressive disorder at its complications. The SVS might be a useful instrument in medical students' guidance, because it evaluates social, behavioral and other factors that might increase vulnerability to stress and lead to development of psychiatric disorders. Moreover, most of these negative factors might be eliminated by using appropriate interventions.

In the present study we did not evaluate neuroendocrine system response, such as cortisol levels, before and after the examination and that is the limitation of our study. Another limitation is that we did not investigate other important behavioral risk factors for mental distress and vulnerability to stress, such as mental disorders, level of perceived stress and burnout. However, we have chosen SVS because we aimed to measure the vulnerability to stress (the level of stress that subject can possibly perceive) instead of the stress level the subject have perceived.

CONCLUSIONS

Results of our study suggest that vulnerability to stress is an important predictor of academic achievements of medical students, since grades were significantly lower among student having medium vulnerability to stress when compared with students having low vulnerability to stress. Oral examination was associated with significant elevation of BP and HR, suggesting that examination should be considered an important stressor at medical school that has a propensity to elicit physiologic responses. We did not find an association between vulnerability to stress and the change in BP or HR in response to oral exam test.

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Dance and movement therapy approaches for patients and disabled clients: theoretical, methodological and practical peculiarities

Šokio ir judesio terapijos metodai pacientams ir neįgaliems klientams: teoriniai, metodologiniai ir praktiniai ypatumai

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SUMMARY

Dance and movement therapy is the object of the study in the article. **The aim** of the study is to determine theoretical, methodological and practical peculiarities of modern dance and movement therapy. The task of the study is to analyze theoretical, methodological and practical peculiarities of modern dance and movement therapy. Research problem is the gap between theory and practical issues in the dance and movement therapy. The definition of scientific novelty: there is not enough dance and movement therapy research work done in Lithuania (where dance and movement therapy is completely new phenomenon) and foreign countries. Research relevance is related to the lack of nonverbal upbringing of the temper and consulting services (e.g. dance and movement therapy) for the customers and patients, where verbal consulting is not efficient enough. That is why the analysis of theoretical, methodological and practical peculiarities of modern dance and movement therapy is so novel. Analysis and synthesis of scientific literature is the research method, which allows to represent research works done in theoretical, methodological and practical sections of Lithuanian and foreign authors. The analysis overtakes the use and influence of modern dance and movement therapy on individual and helps to solve his/hers physical, emotional and social problems.

Results. According to the works of the Lithuanian and international authors, the article explored the use of dance and movement therapy orientated to the solution of physical, emotional and social problems of patients and clients (ill patients and disabled people) with the aim to use variety of dance styles and methods. Conclusion: it was determined, that modern dance and movement therapy, based on various modern theories of psychotherapy that holistically unite the solutions of mind and body problems claiming to become one of the psychotherapy forms, is applicable to different patients according to their needs when verbal therapy does not perform effectively or altogether with verbal psychotherapy. Most importantly it means to create promoting research into methods of dance and movement therapy and nationally validated, professionally recognized training for specialists of dance and movement therapy in Lithuania.

Keywords: dance and movement therapy; psychotherapy; consulting; methods of verbal and nonverbal psychotherapy; holistic; body language.

SANTRAUKA

Tyrimo objektas – šokio ir judesio terapijos metodai.

Tyrimo tikslas – nustatyti šiuolaikinės šokio ir judesio terapijos teorinius, metodologinius bei praktinius ypatumus. Tyrimo uždavinys: išanalizuoti šokio ir judesio terapijos teorinius, metodologinius bei praktinius ypatumus. Mokslinė tyrimo problema pasireiškia tuo, kad yra atotrūkis tarp šokio ir judesio terapijos teorijos ir praktikos. Mokslinis naujumas apibrėžiamas, tuo, kad lig šiol tiek užsienio šalyse, tiek Lietuvoje (kur terapijos šokio ir judesio terapijos reiškinys yra visiškai naujas) dar nėra pakankamai atliktų šokio ir judesio terapijos tyrimo darbų bei išskirtų teorinių, metodologinių ir praktinių ypatumų. Stebimas trūkumas neverbalinio charakterio ugdymo bei konsultavimo paslaugų (pavyzdžiui, taikant šokio ir judesio terapiją), kurias galima būtų teikti pacientams, kai verbalinis konsultavimas yra neefektyvus. Todėl šokio ir judesio terapijos teorinių, metodologinių bei praktinių sąsajų nagrinėjimas yra ne tik naujas, bet ir labai aktualus. Straipsnyje naudotas tyrimo metodas: mokslinės literatūros duomenų analizė ir sintezė, leidžia pateikti Lietuvos ir užsienio autorių mokslinių darbų nagrinėjimą teoriniais, metodologiniais ir praktiniais pjūviais. Pateikta mokslinės literatūros apžvalga apima šiuolaikinės šokio ir judesio terapijos taikymą bei poveikį individui, sprendžiant jo fizines, emocines bei socialines problemas.

Rezultatai. Išanalizavus užsienio šalių ir Lietuvos autorių darbus, išnagrinėtas šiuolaikinės šokio ir judesio terapijos taikymas, orientuojantis į pacientų/klientų (ligonių ir neįgaliųjų) fizines, emocines bei socialines problemas tuo tikslu, naudojant įvairius šokio stilius bei metodus. Išvada: nustatyta, kad šokio ir judesio terapijos šiuolaikinė praktika, grįsta įvairiomis naujomis teorijomis, holistiškai apjungiančiomis kūno ir psichikos problemų praktinį sprendimą, pretenduoja tapti viena iš psichoterapijos formų, taikomų įvairiems pacientams pagal jų poreikius tada, kai verbalinė terapija yra ne tokia efektyvi arba drauge su verbaline psichoterapija. Svarbiausia, yra skatinti šokio ir judesio terapijos tyrimus, validuotus nacionaliniu lygiu ir organizuoti specialistų, galinčių teikti terapijos, taikant šokį ir judesį paslaugas, profesinės kvalifikacijos mokymus Lietuvoje.

Raktiniai žodžiai: šokio ir judesio terapija; psichoterapija; verbalinės ir neverbalinės psichoterapijos metodai; holistinis; kūno kalba.

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INTRODUCTION

Dance and movement therapy (hereinafter, DMT) is gaining greater recognition abroad and in Lithuania. DMT professionals use a variety of creative methods to help people who can be hardly treated by verbal, counselling and psychotherapeutic measures, or when such measures are not satisfactory at all. Scientific research problem was formulated with the aim to understand and develop DMT as integrated part of psychotherapy and thus to perform an overview of the interfaces of practical application and theoretical justification thereof. The scientific problem occurs as a gap between the practical application of DMT for persons who have been diagnosed with mental or physical health problems, in solving their social problems, and the theoretical, methodological approaches motivating such practices in Lithuania. In the view of a recognized expression of globalization, in the context of intercultural traction and due to entrenchment of educational borrowing policy, manifested in terms of Comparative Education [1] there is an opportunity in Lithuania for validation of the professional specialty in the field of DMT. The focus is on the global educational trend - an individual's life-long learning and changes in the independent Lithuanian education system, which reflects global and, in particular, European advanced education trends. The need to develop dissemination of art therapy (including art, dance movement, drama, music and similar therapies) existing in European countries, promotes systematic education of professionals, who use DMT or its elements, and validation thereof at the national level. (The European Consortium of Arts Therapies Education [ECArTE was established in 1991; it combines 21 institutes of 7 European countries and works to formulate educational standards of art therapies in Europe (including art, dance, drama and music therapy), which would be validated and professionally acceptable at a national level.]). Scientific novelty is defined by the fact that so far there are not enough completed researches on DMT either abroad or in Lithuania (where DMT phenomenon, as a research subject, is totally new, and the specialist educational standards are not defined, as compared to other countries). M. Chace, M. Whitehouse and T. Scoop‘s experience is continuously referred to, who first tried to seek practical and theoretical interfaces of DMT. Later on H. Payne [2-5] revealed general and exceptional features of DMT. B. Meekums [6] determined that the development of creativity has an impact on personal health improvement. She examined DMT features and concluded that the promotion of creativity had a substantial therapeutic effect, as well as development of the relationship between the patient and the DMT professional. J. Hanna [7] mostly reviewed the psycho-biological, communicative and emotional features of dance. A. Kaeppler [8-10] developed the concept that dance reflected structured movement systems that were determined by the kinesthetic experience and communication. M. Lieijssen [11] focus is on the practice of psychotherapy and especially on how psychotherapists can improve their verbal psychotherapy by adding a bodily perspective to their existing ways of working. In an experiential map of body-orientedness, different approaches can be situated on a continuum from verbal to nonverbal: on one side therapy that works with mostly verbal communication and on the other side therapy where words are hardly used and attention goes to body work and bodily expression.

Studies on the DMT topic only start to emerge in Lithuania: social pedagogy analyzed the application of R. Laban‘s practical experience in students' education [12]; public health education analyzed the effect of dancing on disabled people [13]; G. Karoblis‘s [14] doctoral thesis on philosophy summarized the researches dealing with sports dance phenomenology, etc.; B. Baneviciute‘s thesis studied dance skills education in early adolescence [15]. Scientific novelty is perceived in the fact that scientists have not broadly examined the DMT phenomenon in Lithuania, and there is a lack of comprehensive disclosure of theoretical, methodological and practical aspects of this new therapeutic approach. Scientific relevance is related to the fact that it is important to investigate the effect of not only verbal but also non-verbal psychotherapy (e.g. DMT), by applying the science-based research methods. The research of the theoretical, methodological and practical interfaces of DMT presented in this article is not merely new, but also highly relevant for the integration of non-verbal methods alongside with verbal psychotherapy.

The goal of the research is to establish the theoretical, methodological and practical peculiarities of modern DMT for patients and disabled clients.

The methods of the research: the analysis and synthesis of scientific literature [16], and the elements of comparative education have been applied [17]. Following the studies of foreign [3-5, 18-23] and Lithuanian authors [13-15, 24-27] the application of modern DMT has been examined, focusing on the physical, emotional and social problems of patients and clients (patients and people with disabilities), using a variety of dance styles and techniques [28-33].

THE RESULTS OF THE RESEARCH

Theoretical basis of DMT. DMT is a psychotherapeutic method, using the dance and movement process to maintain the emotional, cognitive, social, physical functioning of individuals, helping them to become more involved in social relationships and social interactions [34]. Theoretical peculiarities of the dance and movement therapy: 1) authenticity; 2) creativity; 3) a holistic approach to a person and his/her environment (the unity of cognitive and bodily “Self‘).

The theoretical justification of DMT. Modern DMT professionals use both psychodynamic theories and psychotherapy techniques focused on personality growth, which combine non-verbal communication competencies and other education knowledge and skills of DMT. However, there is no single, centralized and universally accepted theory that could justify DMT.

The general theory of movement functioning according to I. Bartenieff and D. Lewis [19]. In 1980 they proposed the general theory of movement functioning, arguing that the body and its movement mediate between the inside of the human body (internal processes) and its external environment, thus expressing the functions of satisfaction, coordination and other needs in both environments. Most DMT specialists apply this theory in practice as a working model. They argue that a person's body develops depending on its use, and this has an impact on the psychological health and disease state. M. Chace [18] said that the muscular activity, in expressing emotions,

is the basis for DMT, because it is a measure of structuring and organization of the human body activity. According to her, dance is a potential tool for communication and re-integration into society, especially for patients with severe mental illness. DMT provides a special therapeutic environment, where different issues of self-communication and interaction with others can be explored and co-experienced.

The theories of personality's bodily "Self". The basic theories, examining the formation of the role of personality's bodily "Self", represent more biological approach to a person's body. On the one hand, the effect of social reality on the perception of human body and personality is emphasized, on the other hand, the dialectical conflict between a person's individual biological and social identity is underlined. V. N. Nikitin [29] analyzed the psychological and psychotherapeutic scientific literature by Russian and other foreign authors about the content of a person's bodily "Self". He said that one of the structural parts of the human cognition is the knowledge of the bodily "Self", and defined the "Self" as an integrated mental and social – cultural structure formed in the personality's development process, during which a person identifies with his/her bodily self. This is especially important for the application of DMT in cases of mental and physical illness and in rehabilitation of the sick and the disabled. For example, after a spinal injury, when the human body is no longer that what a person would like to see and accept, as well as in other areas, working with teenagers or the elderly, who cannot accept the biological nature of their bodily "Self", DMT can help draw attention to the body. DMT aims at helping a person after an injury or serious illness to shape his/her own overall identity, as well as the characteristic features according to the respective sub-cultural social environment and its changes.

The methodological peculiarities of DMT. The methodological rationale of DMT is based on theoretical assumptions that the therapeutic effects of dance and movement evoke the correction process of physical, mental and social functioning of a person involved in the therapy [29]. In the analysis of the methodological peculiarities of DMT it is important to note that dance could not be and has not been applied directly to patients. M. Chace, M. Whitehouse and T. Scoop spent a lot of years in reflecting the training of DMT and only after that presented information on the professional competencies and skills of the dance specialists required for usage of DMT in psychotherapy. These are observation, interpretation, change of dance elements, e.g., rhythm and space, to satisfy patients' needs. In June of 1942 M. Chace was invited to work with patients in St. Elizabeth hospital in Washington, where she first described the DMT process. This created the theoretical and methodological basis and allowed the development of DMT to contemporary practice. In the early development phase of DMT practice it was influenced by widely recognized psychodynamic psychotherapeutic theories in 1940 – 1960 [35]. In addition to that revival of nonverbal communication studies in 1960–1970 [36] and increasing awareness of the need to pay attention to a person's body in case of psychiatric disorders [37] opened the way for the use of other psychotherapeutic theories that focused on the personal growth of individuals, connecting internal mental processes with their social environment.

The methodological aspects of DMT for patients and disabled clients are particularly important in applying this kind of psychotherapy in rehabilitation. DMT specialists integrate specific knowledge about the body, movement, motion and expression with the psychotherapeutic, psychological counselling and rehabilitation skills to help individuals upon their demands and by applying as wide range of treatment as possible [2-4, 28]. Social, emotional, cognitive and psychological problems can be solved in DMT group or individual sessions. Using different tools, work is done in various clinical environments, ranging from hospitals and clinics to the schools. The fact that DMT specialists focus more on a person's body language rather than verbal expression, distinguishes DMT among other psychotherapy types. However, although the roots and practice of DMT have much in common with psychodynamic rather than alternative therapies, it is often classified as a complementary therapy. I. Zwerling [38] states that there is a discussion ongoing about the necessity to consider DMT as a primary therapy. Essential methodological peculiarities of DMT for for patients and disabled clients, in our opinion, have been formed historically and include theoretical insights of psychotherapy, practical studies of DMT and the summaries of their results.

The practical peculiarities of DMT. The concept of practice has remained unchanged since the ideas outlined by the first DMT professionals, when the motion and movement had been seen as an individual and complex communication through the development of expression. A person's body and movement are seen as DMT language, which should not be discouraged by the therapist's interventions, because otherwise it would be equivalent to the instructions provided in the verbal therapy on what patients should speak. DMT currently aims to measure and record the correction results of a person's physical, mental and social functioning. For this purpose, the experimental-clinical trials of movement are carried out.

Spread. DMT was formed as an official psychotherapeutic practice in 1940 [39], affected by spreading therapeutic practice of using dance and movement in Europe and other countries [39]. The professional activity of specialists, using dance and movement as therapeutic methods, started in the USA around 1966 [28]. The American Dance Therapy Association (hereinafter referred to as the ADTA) launched its activities as a specialized organization with 73 eligible members.

Locations of use of DMT. DMT professionals work in psychiatric and rehabilitation institutions, schools, care facilities, addiction treatment centers, health care institutions, counselling and crisis welfare and alternative treatment centers.

DMT practice targets. DMT is an opportunity for treatment, relaxation, and celebration. This therapy is an effective tool used for stress management and solution of physical and mental health problems [40]. The question arises: for what patients DMT is applied; what are the problems of these patients and their solutions; how are DMT professionals working and what is the practical therapeutic process?

Patients. DMT professionals work with individuals of all age groups, groups and families. The contemporary categories of patients participating in DMT have expanded and include both educated and sick children [41, 42], women having breast cancer [43, 44], individuals suffering from eating disorders [45], patients with Parkinson's disease [46], cardiologic patients,

persons with spinal cord injury, using wheelchairs [27, 47].

Most DMT professionals work in the areas of personality growth and social welfare, palliative care, medical illness, developmental disabilities and addictions. About 60% of DMT professionals classify their activities as psychiatric and psychotherapeutic treatment [28]. Since 1970 up to now DMT has been applied in working with such social groups as teenagers and parents, children with autism and developmental disabilities, the elderly and old people. When integrated into psychotherapy, DMT can be applied for individual patients diagnosed with, for example, mental health disorders, post-traumatic stress syndrome, or for persons having the refugee status, in solving their psychosocial problems [3].

Patients' and disabled clients problems. After emotional stress emotions remain in the human body for a long time. Without the ability to relax emotionally, the emotions existing in the human body can turn into frustration, discouragement, fear, anger, and self-destroying behavior. Words are only one way of expressing own feelings and emotions. R. F. Cruz [28] states that ~ 84% of information during communication is received and transmitted non-verbally. Our bodies have a peculiar vocabulary that had been formed much earlier than we started talking. Movements and body language are most often more honest expression and evaluation of us, as we are. Our body communicates all the time. Therefore, we communicate in rest and sleep, while being free or during a rage attack.

DMT professionals help their clients to increase self-respect, change appearance, develop effective communication in order to gain (communication) skills and improve interpersonal relations with others, broaden the movement vocabulary, and acquire communication insights. The insights and experience gained during dance and movement, are translated into behavior. New ways and opportunities are created, which would assist the client to deal with problems in his/her daily life.

Compliance of the competencies of a DMT specialist with a client's needs. The skills of professionals using dance and movement techniques in the therapy shall meet each client/patient's uniqueness and needs, by accordingly selecting the right form of dance or movement. DMT specialists use movement and body language as the main tool to monitor, assess, analyze and perform therapeutic interactions and therapeutic interventions. Therefore, development of educational competencies of DMT professionals must include very different styles and shapes of dance and mobility.

The practical methods of DMT. There are no equal forms of DMT treatment. Despite the different methodologies used and the variety of the techniques, the common feature is that the body movements are combined with feelings. And it gives good results in psychotherapy [31]. Whether choreography (stylized), or improvised movement is used to address the social, emotional, cognitive and physical problems, the essential aspect of DMT is that the body language unites both body and mind.

In this article we divide the methods into several categories that are inter-related but still different: 1) by dance and movement process; 2) by dance and movement styles; and 3) by dance and movement rhythm.

The methods by DMT process. Considering DMT as treatment, the therapeutic process is analyzed.

The general process scheme of DMT according to M. Chase basically covers three main phases: 1) clinical preparation and choice of diagnostics; 2) the first phase of treatment: monitoring of the patient's body movements and charting of monitoring scheme, as well as selection of further movement and dance treatment; 3) the second phase of treatment: analysis of the patient‘s movements, consisting of information about the movement energy and dynamics in the treatment process [31].

The DMT process scheme according to M. Leventhal. Most professionals use American M. Leventhal‘s method [48], including five stages: 1) physical, mental training, warm-up, the patient's relaxation and preparation for unfolding; 2) selection of the process scheme proposed by the therapist or the patient; 3) selection and performance of exercises, combining the body and mental experiences in a single act; 4) stop and concentration on search for the patient‘s most important moment, experience; 5) the end, covering mainly movement and dance, often carried out together with the therapist. M. Leventhal says that working in this way, the patient is gaining more confidence, and the therapist can better monitor the patient's vital problems.

DMT process scheme, using various techniques based on the "here and now" principle. These are Gestalt psychotherapy technique [49]; psychoanalytic "breathing together" technique [50]; the body integration technique [51]. Other methods are also used, by applying breathing and touching.

Methods by dance and movement style. Styles and shape of dance and movement are not merely tools used for recognition of the patient/client‘s issues, but also a powerful therapeutic method helping the personality to express in its social context. Dance movements can reveal joy, pain, sadness, anger, aggression, etc. For all those who have problems in communication, who for one reason or another, distance themselves from the surrounding social environment, dancing helps to "open up" the limits of their interpersonal relationships with others that they have created. The dance movements offered to the patients are selected so that they could be performed and the patients would not be afraid of doing something in a wrong manner. In order to help the patients to express their feelings, various dance steps and movement styles are applicable (Table 1. DMT methods by dance and movement style): ancient dances (have a sedative effect); classic ballet (helps to stretch the muscles, shape the body lines; the patient more quickly perceives the body limits, for example, feels the right or left side, etc.); ballroom dances (sports, household or social dancing – waltz, tango, foxtrot, boogie-woogie, etc.) help in solving social adaptation and integration problems. C. Schmais recommends to select the dancing style depending on the person‘s needs. Shy and constrained persons are apt for Spanish dances; lacking self-confidence, the ones confused in different situations are apt for active (sharp) jazz movement; belly dancing is suitable for sexual development. Sometimes a specific dance shape is chosen, which matches particular feelings. G. Karoblis‘s [14] insights conceptually relate the treatment of amateur dance and application of modern ballroom dance for therapeutic purposes – change of human physical, social, mental, spiritual functioning, i.e., presence. G. Don Campbell [52] states that it is essential to learn jazz for everyone, especially for children, because it educates the ability to maintain a dialogue, without losing from the sight the entirety of social function and reconciliation of differences, even if they are opposites.

Table 1. **DMT methods by dance and movement style. (Created by Soraka and Sapezinskiene)**

Ref. no.	Style	Example	Influence on the client / patient's well-being
1.	Ancient dances	Polonaise, etc.	Have a sedative effect
2.	Classic ballet		Helps to stretch the muscles, shapes the body lines, makes the patient more quickly perceive own body limits.
3.	Ballroom dances (sports, household or social dancing	Waltz, tango, foxtrot, boogie-woogie, etc.	Help in solving social adaptation and integration problems. Applicable for people who have been isolated from society for a longer period of time.
4.	Latin American dances	Samba, Brazilian mamba, etc.	Helps to maintain a coherent personal mind and body being, to feel safe, pleasant, increase human energy.
5.	Freestyle (improvisational) dance		Helps the patient to resume forgotten movements that were once known. Actualizes feeling conflicts, the solution of which requires move from perception of senses to the action plan.
6.	Authentic dance	Contact dance – improvisation, etc.	It is a person's body therapy that exploits the game and communication in dancing. It teaches to feel own body, listen to oneself, to own intuition and to decide at a certain moment of time. The knowledge of the world is formed through the person's body: trust, awareness of responsibility and resistance, sense of intuition.
7.	Individual and group dance	Greek dance "Zorba" with increasing rhythm, etc.	It develops an individual's ability to feel oneself, helps to distinguish individuality and teaches to adequately respond to others; it influences development of social human feelings, in particular transformation and reduction of such feelings as fear and anger.
8.	Jazz dance		It educates the ability to maintain a dialogue, without losing from the sight the entirety, socially function and reconciliation of differences. It helps to deal with difficult tasks, promotes creativity and "breaking" of stereotypes.

D. Coulter recommends jazz as the way helping the patients to "break" the stereotypes. He argues that it is complicated to know jazz. In order to "get out of jazz twists labyrinth", we have to keep the rhythm. Jazz moves into chaos; from which it creates order. G. Don Campbell [52] notes that the healthiest and most readily available are Latin American dances (for example, samba and Brazilian mamba), and their rhythms. The Latin style helps to maintain a coherent personal mind and body being, to feel safe, pleasant, increase human energy. Freestyle (improvisational) dance is the patient's movement by own rhythm, freestyle dance improvisation helping the patient resume forgotten movements that were once known, i.e., crawling, rotation, marching and other basic movements learned in infancy and childhood. Movements awaken memory, facilitate the exchange of feelings that actualize conflicts, for the decisions of which patients are encouraged to transfer to a conscious plan, which is one of the therapeutic goals [53]. In a freestyle dance the patient learns to use space of the room, play with different spatial levels, vary in strength and power of the body, consciously work with free improvisation rhythm and pace, develop individual choreography. The patient gives aesthetic form to his/her improvised dance.

The example of an authentic dance may be the so-called contact dance – improvisation: intuitive body therapy that exploits the game and communication in dancing, and is based on the intuition of DMT participants. Contact dance teaches to feel own body, listen to oneself, to own intuition and to decide at a certain moment of time. The contact improvisation includes a wide variety of technique directions, such as yoga, aikido, contemporary dance, theater, acrobatic elements [54]. Contact improvisation gives the body a vital force, lightness, flexibility and plasticity.

Individual and group dance styles. The individual style of art therapy, including dance therapy, is prescribed by a physician or a DMT specialist. Group sessions are used to solve communication and social problems. At the beginning of the group dance and movement classes the group "warm-up", "introduction" methods, etc. are used, characterized by synchronicity, rhythm intensification. Group DMT develops an individual's ability to feel oneself, it helps to distinguish individuality and teaches to adequately respond to others. During interaction with other members of the group there emerges an opportunity to "give" and to "take", to transform such feelings as anger, fear, and, consequently, reduce or get out of the social isolation.

Styles change. During treatment, the dance styles can be switched, expressing different characters and movements. For example, the Canadian dance specialist M. Danson cooperated with doctors, psychologists, dieticians, masseurs, and others. Her patients in Toronto clinic followed a special diet for unhealthy obesity. M. Danson prepared DMT programs that consisted of three sensuous state solutions and respectively different styles.

During the first stage the body had to be provided with energy. Since the body was almost deprived of food, it was necessary to get as much feeling stimulation as possible. It can be achieved through dancing, and thus feelings become brighter. M. Daison stressed positivity of this stage, by activating movements, bold gestures and high jumps.

The second stage – work with depressive state that is reflected in heavy helplessness of the human body. The belly is growling, the mouth and eyes want to swallow food, all thoughts are just about the food. At this moment rotating movements are necessary, such as calm soothing waltz. During this stage, patients start to talk about their personal feelings and embonpoint problems.

In the third, final stage the patients gleefully spin, feeling lightness and happiness. Circle dance develops group feelings, allowing to feel the common success.

Methods by dance and movement rhythm. The following methods can be used for DMT: eurhythmics (E.J. Dalcroze); R. Steiner's eurhythmics, four elements dance method (A. Giršon), etc. This article deals with eurhythmics (E.J. Dalcroze) and four elements dance method (A. Giršon).

Eurhythmics (rhythmic system) method. The core of E. J. Dalcroze's method is rhythm [26]. Eurhythmics is a harmonious and expressive movement and motion. The essence of the method is that "the first and the main musical instrument for a person is his/her own body, used for expression of his/her feelings and emotions" [26]. Improvisation combines music and the body and is a natural extension of what a person learns while listening to music and training own body movements. Everything is focused on the process rather on the final result (as it is in the case of learning how to dance). However, the scientific studies show that DMT training sessions allow to develop the human capacity to understand the music and evolve. A. Vilkelienė cites the qualitative research (the case study of patients with cerebral palsy), and emphasizes what needs to be considered when modeling the impact of the music on a disabled individual. Rhythm is one of the main means of musical expression, covering both artistic and therapeutic effects on a disabled person. The strength of the effects depends on the disabled person's sensory and emotional memory.

Four elements dance method (A. Giršon). The author of the method A. Giršon uses the metaphorical technique of dynamic visualization (visualization of movements), based on the sensation of the body and its inner rhythm [30]. This DMT covers five stages. The first four stages are dedicated to the journey to the so called four elements world, and the fifth stage is the final and inclusive one. Each stage comprises various dance and movement techniques: 1) keys to the body (the earth element – sensation of own body; the air element – breathing; the water element –flow of blood and other body fluids; the fire element – internal rhythm, e.g., heartbeat, pulse, etc.; 2) visualization of one of the stages in space, using dance and movement; 3) identification with dance and movement expressed by the element; 4) the end of the element expression, gaining awards of the element and corresponding titles; 5) the ritual ending, by saying out loud what awards and titles a patient has acquired. The final part of the session includes the closing dance expressing the combined elements.

Combination of DMT with other forms of art therapy. O. A. Svirepo and O. S. Tumanova state that Moreno has used DMT as an auxiliary therapeutic tool in psychodrama therapy, but, in fact, the benefit is that the dance does not require verbal communication at all [30].

SCIENTIFIC RESEARCH ON DMT

Currently the terms etic and emic are often used, which are defined by linguists as meaning the differences in approach (etic – theoretical scientific approach, emic – local people approach), according to Keneth Pike's analytical method [55]. In empirical studies this reflects the principles of method harmonization (triangulation of the quantitative and qualitative research methods). Within qualitative research, there are a number of methodologies which significantly favor the emic over the etic and vice versa [56]. The etic perspective encompasses an external view on a culture, language, meaning associations and real-world events. An etic approach (sometimes referred to as "outsider," "deductive," or "top-down") uses as its starting point theories, hypothesis, perspectives, and concepts from outside of the setting being studied. Already at the end of the nineteenth century and at the beginning of the twentieth century the first dance theorists (James George Frazer, Jane Ellen Harrison, Ernst Grosse, Edward Burnett Tylor) were able to show that dance was very important for the study of society [55]. Dance studies were based on evolutionism theory, which argued that dance had evolved from primitive into more complex, "civilized" forms. Now it is appreciated that all cultures and their dances have their own unique stories, and it is not possible to establish identical categories in different cultures [55]. In investigating the effects of dance movement therapy (DMT) in a psychiatric outpatient clinic with patients diagnosed with depression. DMT aims to engage the patients in physical and verbal exploration of their experiences generated in movement based interaction. The assumption was that DMT, which includes both physical engagement as well as emotional and social exploration, would alleviate the mood and psychiatric symptoms. in investigating the effects of dance movement therapy (DMT) in a psychiatric outpatient clinic with patients diagnosed with depression. DMT aims to engage the patients in physical and verbal exploration of their experiences generated in movement based interaction. The assumption was that DMT, which includes both physical engagement as well as emotional and social exploration, would alleviate the mood and psychiatric symptoms [57].

Traditionally the qualitative research strategy of DMT is dominated, when the performed dance can be studied according to its content and form, as a process in relation to the other participants, i.e., as a subjective research material in the properly constructed methodology. Dance can be content and/or form, process and/or product, in relation to qualitative inquiry [32]. Although dance scientists and some dance education researchers use primarily quantitative methods, a variety of qualitative, usually interdisciplinary, approaches have dominated dance research, with researchers invested in exploring dance and dancing as bodily experience, aesthetic object, and social and cultural process [32]. The researchers' self-presentations are becoming increasingly popular (who I am, why I do this, what my experience is, I have the right to write this and that, because I am this and that), by emphasizing the present, and the dance tends to be analyzed as a practice: while previously scientists used to trace dance forms, now it is dancers' experience that is distinguished [55]. This is related to the research objectives of the DMT practice.

DMT specialists have always sought to explore with the purpose to understand and explain how DMT works and what they do [58]. The phenomenological research and data collection method is most commonly used, which is combined with the traditional research strategy (for example, a thorough monitoring of personal behavior and its changes in the natural environment). Sometimes video and recording equipment is used for capturing the research results. According to C. Schmais and D.J. Felber [58], three main strategies are used for the DMT effectiveness studies: research scales, experimental

studies and descriptive analysis. The scales are created with the purpose to measure the differences in an individual‘s behavior and other personal characteristics, as well as their changes in group DMT, but this method does not reveal much information about the ongoing group processes. Experimental studies measure a person‘s behavioral changes in isolation, by obtaining the objective information about the phenomenon, but little is reflected on the group processes. Lastly, descriptive account of dance therapy sessions furnishes a comprehensive picture of the event, but they are highly subjective and not replicable [58]. Filming or video recording technique makes it possible to investigate the group processes, to isolate and monitor the manifestations of group process development, leadership competition models, expression of movement and touch and how it affects the development of interpersonal relationship, the exerted synchronized activities and how they affect the participants' behavioral development, etc. [58].

Several DMT studies examined a person‘s self-perception and expression of his/her identity in the group [7]. The pilot study to assess the effectiveness of dance psychotherapy showed that for patients with medically unexplained symptoms the change of approach to symptoms can be very useful. For this purpose, special interventions are used to stimulate the mind and body interactions, i.e., to promote self-changes in awareness and behavior [4, 5]. It has been studied and continuously analyzed, whether after 12 weeks of group DMT its participants (with identified medically unexplained symptoms) have changed the approach to their body symptoms and received any other benefit from their perspective [4, 5].

Historically, it was important to demonstrate that DMT was effective, especially because of the fact that psychotherapeutic processes holistically integrated a person's emotional, physical and cognitive functioning [59]. Some researchers are now incorporating research and language from neuroscience to corroborate basic tenets of DMT and offer a bridge to other disciplines [60-64]. Dance/movement therapy actively engages the brain through the body with interventions that impact both physical and psychological functioning [65-67].

Focusing on the DMT benefit for treatment of post-traumatic symptoms, it is important to note that as the fields of trauma psychology and neuroscience seek to understand how the body-mind is affected by developmental trauma, it is hoped that dance/movement therapy might contribute its rich arsenal of relational, movement, and body-based interventions to support the development of a holistic and effective treatment model for clients dealing with trauma-related dissociation [68]. The role of dance/movement therapy in connection with five areas of neurological functioning: 1) arousal and rest; 2) emotional regulation; 3) implicit (preverbal, preconscious) and explicit (verbal, conscious) memory; 4) the mirror neuron system; 5) right/left brain integration [63]. The clinical examples of application of the group DMT method are provided below.

CLINICAL EXAMPLES [63]

A group session began with a member talking about feeling invaded by a family member's "meanness" towards her. Another group member related to the confusion and frustration through her own experience of struggling with how to respond to a co-worker's aggression. The group decided to explore the theme of setting boundaries through a movement experience in pairs. One person in each dyad embodied an "aggressive" energy towards the other, and second experimented with full body movement responses. A range of full effort movement dynamics filled the room as interactive dances came alive in each pair. Afterward, one member stated, "I didn't realize how mad I was till I felt the heat in my body, and moving with my instinct to push back felt so satisfying." Another had found a different solution, "I wanted to stay connected, and I moved slightly to deflect the energy coming at me, so I didn't have to absorb it all. This gave me an idea about how I might approach the situation." The following session, group members referred back to their movement experiences as they tracked the ways in which they had set boundaries in life situations that had come up during the week. There was excitement in the room as they spoke. One participant stated, 'The movement impacted what I decided to do directly-when things got heated, I knew it would not be productive, so I just changed the subject, and it worked! I felt less out of control.' The movement experience had provided a dynamic opportunity to explore the relationship between body and emotions, to evoke awareness and explore choice, and respond to complex situations more effectively. As a more conscious interrelationship between the mind and the body is developed, the body naturally becomes the resource for emotional self-regulation and integration. Moving actively, with full effort, can allow strong feelings, such as anger, rage, or joy, to be more consciously experienced and expressed, making them more available for verbal processing. Depending on one's needs in the moment, sensing and responding to the body through movement can be used effectively to regulate or contain emotion [67].

DISCUSSION OF THE RESULTS

The research results achieved by the authors of the article and foreign scientists [2-5, 7, 18-20, 27, 33, 69, 70] coincide in several basic aspects. The DMT methods are applied to patients and the sick: first, with physical and / or mental disabilities, social integrity problems, as well as for the purposes of personality development; second, in cases, where verbal therapy does not work, or for the purpose to supplement the verbal therapy treatment by non-verbal dance and movement therapy interventions. Scientific literature database, compared with the practical use of DMT methods, is poor; the research work done is not sufficient to allow the dance and movement therapy evolves as one of the forms of psychotherapy.

CONCLUSION

It has been determined that modern DMT practice for patients and disabled clients, based on various modern theories, holistically embracing the person's body and mental practical problems, is gaining self-methodological basis and aims to become one of the form of psychotherapy in Lithuania, which can be applied for different patients according to their needs, when verbal therapy is not as effective, or in line with verbal psychotherapy. However, the most important task is to promote the DMT research validated at the national level, and to conduct the recognized professional training for specialists who provide DMT in Lithuania.

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The diagnostic challenge of simple schizophrenia: a case report

Paprastosios šizofrenijos diagnostika: klinikinio atvejo aprašymas

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SUMMARY

Background. Simple schizophrenia – a diagnosis, removed from Diagnostic and Statistical Manual of Mental Disorder (DSM), but still has remained in International Classification of Diseases (ICD). This form of schizophrenia mostly definable by a slow progressive development of negative symptoms, leading into personal and social dysfunction, without any manifestation of acute psychotic symptoms. This type of disease has been hypodiagnosed even in ICD classification guided countries.

Case report. We are presenting the clinical case of 23 years old man, first time diagnosed with simple schizophrenia. The changes in personality and the first signs of psychiatric illness manifested since early adolescentce. The abscene of acute psychotic symptoms did not give base for earlier diagnosis: the diagnose of simple schizophrenia validated only after social and ocupational problems occured.

Conclusion. This case report describes a typical course of simple schizophrenia with premorbidic personality traits and development of prodromic symptoms; and reveals slow disease progression without acute psychotic symptoms.

Keywords: simple schizophrenia; international disease classification; diagnosis

SANTRAUKA

Įvadas. Paprastoji šizofrenija – diagnozė, išbraukta iš DSM (angl. Diagnostic and Statistical Manual of Mental Disorders), tačiau vis dar naudojama Tarptautinėje Ligų klasifikacijoje (TLK). Ši ligos forma apibūdinama pamažu progresuojančiais negatyvia simptomatika, nesant išreikštų pozityvių simptomų. Net ir TLK klasifikacija besiremiančiose šalyse ši diagnozė nepagrįstai nustatoma vis rečiau.

Atvejo aprašymas. Pristatome 23 metų amžiaus vyro gyvenimo ir ligos istoriją, kuriam pirmą kartą patekus į gydymo įstaigą buvo diagnozuota paprastoji šizofrenija. Mūsų paciento besikeičiančią asmenybę ir pirmuosius ligos simptomus galime stebėti nuo ankstyvos paauglystės, tačiau galimybė diagnozuoti ligą, kuri nepasireiškė ūmine psichozine simptomatika, atsirado tik pacientui susidūrus su socialinėmis ir darbinėmis problemomis.

Išvada. Šio klinikiniame atvejo aprašymas puikiai iliustruoja paprastosios šizofrenijos progresavimą su būdingais paciento premormidiniais asmenybės bruožais ir prodrominiais sutrikimo simptomais, bei klinikinę ligos išraišką – ūminės psichozinės simptomatikos nebuvimą ir lėtą ligos progresavimą.

Raktažodžiai: paprastoji šizofrenija; tarptautinė ligų klasifikacija; diagnozė

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BACKGROUND

Simple schizophrenia undoubtedly has an unstable and controversial history. It has originated in 1903, when Swiss psychiatrist Otto Diem in monograph „The simple dementing form of dementia praecox" marked a different insidious type of dementia praecox by typical early onset and progressive course, highlighting absence of acute symptoms. The clinical manifestation was described as "moderate degree of mental debility, dullness and apathy with moments of excitability, a loss of mental alertness, an inability to act independently and a marked lack of judgement; at the same time comprehension and orientation are maintained and memory is not noticeably affected" [1]. Eugen Bleuler in 1908 added a subtype schizophrenia simplex in Emil Kraepelin organized categorization [2]. Since 1948 the term was included into the first official diagnostic manual with a classification of mental disorders – the 6th version of International Classification of Diseases (ICD-6) [3]. After four years, it was published for the first time as a simple type of schizophrenic reaction in the Diagnostic and Statistical Manual of Mental Disorder (DSM-I) [4]. Simple schizophrenia remained there for many years, although criticism about this diagnostic category never ends [5]. The International Pilot Study of Schizophrenia in 1978 concluded a vague description of simple schizophrenia and lack of scientific studies [6]; after that, the simple schizophrenia was omitted from DSM-III [7] and also, did not obtain in further classifications. Otherwise the category of simple schizophrenia has never been abandoned from ICD. One of the greatest impacts was done by Russian physician V. G. Levit: he reported 20 years observational data of 200 patients hospitalized by first episode of schizophrenia and concluded that simple schizophrenia, often presenting sluggishness, apathy and passivity, was precisely compatible with typical schizophrenia simplex description. This research confirmed that negative types of symptoms should be considered as initial signs of schizophrenia [7].

In everyday clinical practice using ICD-10 with diagnostic category of simple schizophrenia, we have „a disorder, in which there is an insidious but progressive development of oddities of conduct, inability to meet the demands of society, and decline in total performance" [8]. The pure forms of simple schizophrenia are very uncommon and are not easy to recognize; meanwhile we have some unsettled questions about boundaries on schizotypal disorders. Even nowadays the diagnostic of simple schizophrenia remains unclear. Generally patients with this disorder apply for psychiatric treatment after a long outbreak, especially when symptoms and disturbances of psychosocial functioning become severe or social-economic problems already appear [9, 10, 5].

In this case report we present the clinical case of patients with diagnosis of simple schizophrenia, which represents a patients life and illness history, reveals diagnostics and differential diagnostics complexity, treatment options and future prognosis.

CASE REPORT

History. A 23 years old male patient was admitted to Psychiatric Department due to his mother and general practitioner concerned, that the patient is acting strange, refuses to go to work, has stopped communicating with family members and has showed episodes of anger or uncontrollable laughter. The patient had no previous psychiatric disorders and the main complaint was painful back and knees as a result of the difficult job.

He was born and grew in Lithuanian city Kaunas; the psychomotor development was normal. He had no known family history of psychiatric disorders, any relatives with suicidal and addictive behavior. Patients mother had been working a big part of a day in the sales office, so for a long time she hadn't noticed changes in son's behavior. His father had engineering degree, but most of the time worked as a church clerk. Patient's father described his relationships with co-workers as strained: he had thoughts that someone was trying to poison him, had been feeling „like dizzy". Patient had never had familiar contact with his father. Patient has a two years older sister; she was always very communicative person, with a lot of social activities. When they were little they would be playing together, both of them had a very close relationship and patient enjoyed it. During last 7-8 years period their relations has changed: despite living together and sharing one room, their contact became formal. Since an early childhood, patient has been sluggish, much slower than other peers, always had troubles with social interactions. Although, at school he had some friends for playing basketball, none of them were close friends. He never had conflicts with teachers. Learning outcomes were average (7/10 marks), much better on humanistic subjects than math. Patient had started to feel sexual desire since 14, but after a year his desire became weaker and gradually he lost his libido completely. His romantic relationship with a classmate at 16 years old had been continuing for about one year without any intimate connection and had broken up without any reason. He was sad about this, but in consideration of his social withdrawal, had never started on another relationship. He has not been drinking and smoking, because he has found it gives him no pleasure. On the last school years, from 17 years old, patient gradually became more solitary, gave up playing basketball with friends, and missed all his interests, started feeling fatigued and most of the time was staying at home. After graduation he had no intention to continue studying and had gained his specialty of car repairman just for mothers inducing. Studies did not interest him and he did not try to find a job by qualification. Patient had an auxiliary jobs several times: during all employments he had troubles in maintaining smooth relations with his colleges. For this reason he had changed his workplace at least 4 times. Out-of-work time he was spending aimless at home, watching all TV-programs one after another, without any contacts with family members. According to his mother report, the patient began to show episodes with unmotivated laugh at 15 years old. He has not been able to explain the causes and to control it. From time to time such episodes recur. Once at 21 years old patient had heard mysterious whispering from the outside „like the sounds of wind". He did not understand the meaning of this speech and he did not react to it; however it never happened again. During last year period he became aggressive and assaultive against family members. Also, in current working place, the patient had hostile relationships. He noticed his co-workers were telling stories and joking about him. Therefore, the patient had figured out that co-workers had been uttering slanders against him and making plans to injure him. For this reason he was displeased

with his job and applied to primary-care physician with active complains on painful back and knees limiting his ability to work. A primary-care physician presuming a mental illness addressed him to Psychiatric Department.

Mental state examination. Patient presented as self-cared man, who looked his stated age. He was approachable to verbal contact, but interacted unwillingly. He showed lack of ability to establish good emotional contact: eye-contact was intermittent, face looked hypo-mimic. Patient had blunted emotional reactions, lack of interest to other people or visiting mother, his mood was monotonous. He claimed having no feelings about anything, but talking about his father and his childhood events, patient became more irritable and anxious. During examination he showed the wary and suspicion. His speech was of slow rate, but coherent and appropriate. The vocabulary was poor and limited. He used to respond after a long silence and often used phrases „I don‘t know“, „I don‘t remember “or answered shortly. Patient expressed suspiciousness towards his co-workers: he had thoughts that he could be harmed or beaten by co-workers, all talks and jokes he had heard considered to be against him. Also, he was suspicious towards other patients in the department. He was avoiding therapy rooms, where he could contact other patients, thinking they could make a mockery of him. Patient showed clear negative symptoms: hypo-volition – he had decreased motivation to initiate and perform self-directed purposeful activities, with no goals in his life, he could spend all day lying in bed; anhedonia – felt no pleasure from any activities and he experienced social withdrawal – limited contacts with people, including his own family members. He had concentration difficulties, was distractible by any insignificant stimulus. He denies any hallucinations or suicidal thoughts. His judgement and insight of illness were poor, although he was compliant with psychiatric hospitalization and treatment. The psychological assessment revealed slow thinking process, loss of coherence and direction of speaking, lower abilities for abstraction with predominance of the coincidence associations. The answers had delitescent and peculiar concept. Multiplicity and sluggish thinking were frequent. The physical, neurological exam, laboratory data and brain MRI was essentially within normal limits.

Hospital course and treatment. Considering patient‘s faulty perceptions of co-workers behavior as interpretational delusions – the antipsychotic treatment was started with a typical antipsychotic Haloperidol (a dose was titrated gradually from 5 to 20mg/day). No side effects were observed; no changes in patients’ behavior were noticed during first two weeks of treatment. Considering negative symptoms to following treatment, atypical antipsychotic Risperidone (up to 4mg/day) was prescribed. Also, no significant effects were observed. During all hospital treatment period, patient’s communication was inhibited: he stayed away from contact with other patients and hospitals staff. He answered briefly, with one or two words, mostly looking through the window. He avoided occupational and group therapies, as well as morning exercises by reason of absence of motivation to make contacts with people. Patient remained quite passive, all day lying in bed without any activity.

Diagnosis. The patient meets the ICD-10 criteria for simple schizophrenia. He has a quite long history of mental illness: premorbid personality traits combining slowness and sluggishness, self-restraint, loneliness, lack of involvement in social interactions. The prodromal phase started at age 15 with emotional outbursts, loosening of sexual desire and narrowing of interests. His gradual loss of interests and social isolation were becoming more significant and deteriorative for last five years. Patient has loss of initiation and spends time idle, aimless and wasting on trifles. His social marginalization is characterized by faulty interpretations of people behaviors, classified as overvalued ideas. His occupational performance is marked declined and has caused severe impairment at work. The patient has no confirmations of active psychotic symptoms, except simple auditory hallucinations (phonemes) occurring only once. The clinical examination shows the deepening of "negative" symptoms – apathy, anhedonia, hypo-volition and affective flattening, social withdrawal with suspicious and defensive behavior, slowness in speech, hypo-mimic face, no eye contact and poor judgement. The patient does not meet criteria for any organic brain disorder or substance use disorder. Psychological assessment confirmed the disturbances of thought process specific to schizophrenia.

Differential diagnosis. Despite the fact that all symptoms of simple schizophrenia have been met, most of them are not specific. It was necessary to make a precise differential diagnosis. Similar clinical presentations are really possible in patients with schizoid personality disorder, in affective disorders, autism spectrum disorders, mental retardation or dementias, physical disorders, after brain injuries or neuroinfectious diseases, like meningitis or encephalitis.

A pattern of detachment from social relationships, including own family, no interest in sexual experience, emotional coldness, detachment and apathy led us to differentiate from schizoid personality disorder. However, we distinguish that schizoid personality disorder shows more specific choices in selective activities and moreover these persons have a quite stable autistic behavior with intense decompensation periods after any psychosocial stress experience.

Some affective disorders, particularly atypical types of depression (adynamic, stuporous, „anaesthesia psychica dolorosa“), could mimic some symptoms of this case. Loss of interests, experience no pleasure in any activity, a social withdrawal led us to differentiate from depressive disorder. However mood disorders always have more or less significant (sometimes it could be masked) affective component of illness, which is the primary cause of psychosocial dysfunction. In our case, the emotional flattening as dominant emotional symptom allowed us to exclude affective disorder.

Such symptoms, like an impairment in social interactions – difficult to keep eyes-contact, hypo-mimic facial expression, no body posture, absence of seeking contact to other people, supposed us to differentiate from autistic spectrum disorder – Asperger‘s syndrome. However, the progressive development of described symptoms and a gradual development of isolation after quite normal social functioning in childhood allowed us to exclude autistic disorder.

We have no data about mental retardation or dementia. The development was normal for his age. There were no periods with potential mental function‘s lesion in patient‘s life. With the same occasion we denied neuroinfection possibility – we had not got any anamnestic data or paraclinic diagnostics confirmations, so there is no need for expectancy

of any infection in the past or in the present. In addition, our patient in late childhood had a brain injury, but trauma was not severe and after long period of time, no residual brain injury symptoms had occured. Also, no somatic disease is confirmed, because of negative paraclinical diagnostic tests and abscene of psychostenic or psychoorganic syndrom.

DISCUSSION

We introduced a case report of simple schizophrenia, which meets all ICD-10 ciriterions and seems like a typical insidious psychosocial deterioration without obvious psychotic symptoms [11]. With this publication we want to remind of hypodiagnosis of simple schizophrenia and make clear why it is difficult to diagnose these patient. This report confirms that patients with such conditions are undisposed to consult a doctor because of their self-neglect [9, 12, 10]. We want to notice that these patients often are brought into hospital by theirs relatives [12, 5] or seek doctors help with other non psychiatric complaints as in our case. It is important to emphasize that in an absence of psychotic signs diagnostic is complicated. Anamnesis oriented into premorbidic personality, prodromal traits and progressively developing negative symptoms leading into total dysfunction possibly could help diagnostic determination [13, 14].

After reviewing some comparable publications we made a comparison and marked a few basic directions concerned with developmental history and clinical features. Premorbidic personality is very common in schizophrenia development [15], especially simple type [13]. Our patient since an early childhood was slow, had troubles with social interactions, became more isolated. Identical social withdrawal and interests lost after normal childhood and academic achievements are found quite often [10, 16, 5]. Prodromal traits is further sign which are indicative of beginning illness [14]. However symptoms are fairly variable. In our case it manifests with increased social isolation and episodes of unmotivated laugh and anger, libido lost, episode of simple auditory hallucination. Literature refers simple schizophrenia prodromal opens with supposedly stress induced acute psychotic episode [12], depression-anxiety alike symptoms [17], aggressiveness and irritability [5], muttering and smiling to self [10] and other odd behaviours [10, 16]. Simple schizophrenia is described mostly by negative schizophrenia symptoms, including anhedonia-asociality, avolition-apathy, affective flattening or blunting, alogia, inattentiveness [18]. Our patient had most of these symptoms, althought his grooming and self hygiene were expressed slightly,but self-neglect is one of most specific and observable simple schizophrenia symptoms [9, 12, 10, 5, 13]. Also we noticed that overvalued ideation at first sight not compatible symptom is presentable not only in our case [12, 13]. Nonetheless these thoughts are far from the delusional thinking such as persecutory or grandiose delusions in paranoid schizophrenia. Unfortunately almost every case end up with total social life and functional breakdown [9, 10, 5]. Therefore a simple schizophrenia is insidious and life destructive mental illness.

The International Classification of Diseases and Related Health Problems (ICD) is currently in its tenth revision. In ICD-11 Beta Draft version, which is not final yet and not proved by WHO also, a diagnostic category of simple schizophrenia (likewise all types of schizophrenia) has been eliminated. So, that truly could mean an end of this psychiatric diagnosis [19].

CONCLUSION

Our case report reminds us to be wary and keep in mind a simple schizophrenia diagnosis in everyday mental physician practice. Also, it describes a typical picture of this type schizophrenia patient and points out main aspects of purposeful anamnesis.

Conflicts of interest

Authors declare no conflicts of interest.

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Exogenous glucocorticoid induced psychiatric disorder

Egzogeninių gliukokortikoidų sukeltas psichikos sutrikimas

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SUMMARY

Introduction. Glucocorticoids are a commonly prescribed class of medication used to suppress the immune system and decrease inflammation. Since their introduction they became widely used to effectively treat a wide range of illnesses – allergies, connective tissue, skin, lung diseases, cancer and to prevent transplant rejection. However, they have many adverse effects, which range from diabetes mellitus, osteoporosis and arterial hypertension to mental disorders.

Case report. For a 49 year old man, after 1 year of chronic glomerulonephritis caused renal insufficiency, renal transplantation was scheduled. Illness was complicated with secondary third grade hypertension. There was no history of mental disorders and use of psychotropic drugs. Before the transplantation standard induction of imunosupression was given: intravenous methylprednisolone 250mg and mycophenolate mofetil 500 mg oral administration. After operation transplanted kidney started to function immediately. Standard postoperative imunosupressive treatment according to the kidney transplantation protocol: calcineurin inhibitors (cyclosporine 4mg/kg/day, later in accordance to its concentration in blood), mycophenolate mofetil 1g two times per day and methylprednisolone 1mg per kilo (70mg), then gradually reducing the dose and in 2-3 weeks reaching maintenance dose (8mg per day). On the eighth day after kidney transplantation patient became psychomotorically agitated, visual hallucinations appeared, persecutory delusions, became disoriented in time, cooperation process has been difficult, thinking viscous, nonproductive. Differential diagnosis was carried out: subarachnoid haemorrhage and hypertensive crisis induced encephalopathy was rejected after the head CT scan. After psychiatrist's consultation delirium syndrome was diagnosed. 5 mg of haloperidol was prescribed intramuscular injection for treatment. Since the psychiatric symptoms have not been improving, the dosage was increased up to maximum 18 mg/d., methylprednisolone dose was further reduced according to the protocol. In continuing treatment with antipsychotics and decreasing glucocorticoid dosage, psychomotoric agitation, disorientation and delusions has been reduced.

Conclusions. To patients that had no previous psychiatric symptoms before kidney transplantation, even when using glucocorticoids according to standard immunosuppression scheme, delirium syndrome might occur. Therefore it is essential to monitor all patients for this adverse effect and teach them and their family members to recognize the symptoms of mental disorders and explain that they should inform their physician about this.

Key words: glucocorticoids, delirium syndrome, renal transplantation, methylprednisolone.

SANTRAUKA

Įvadas. Gliukokortikoidai yra dažnai išrašoma vaistų grupė, naudojama imuniteto slopinimui ir uždegimo mažinimui. Nuo pat jų sukūrimo, šie vaistai tapo plačiai taikomais efektyviam įvairių sutrikimų gydymui – alergijų, jungiamojo audinio, odos, plaučių ligų, vėžio bei transplantuotų organų atmetimo prevencijai. Taip pat jie pasižymi labai įvairiu šalutiniu poveikiu, kuris apima diapazoną nuo cukrinio diabeto, osteoporozės ir arterinės hipertenzijos, iki psichikos sutrikimų.

Atvejo aprašymas. 49 metų amžiaus vyrui po 1 metus trukusio lėtinio glomerulonefrito sukelto galutinio inkstų nepakankamumo atlikta inksto transplantacija. Liga buvo komplikuota antrine trečio laipsnio hipertenzija. Psichikos sutrikimų anamnezėje nenustatyta, psichotropinių vaistų nevartojo. Prieš operaciją skirta standartinė imunosupresijos indukcija: metilprednizolonas 250 mg į veną lašiniu būdu bei mikofenolato mofetilio 500 mg per os. Po operacijos transplantuotas inkstas pradėjo funkcionuoti iš karto. Pradėtas standartinis pooperacinis imunosupresinis gydymas pagal inkstų transplantacijos protokolą. kalcineurino inhibitoriais (ciklosporino 4 mg/kg per dieną, vėliau pagal ciklosporino koncentraciją kraujyje), mikofenolato mofetiliu 1 g 2 kartus per dieną ir metilprednizolonu po 1 mg/kg (70 mg),vėliau palaipsniui dozę mažinant ir per 2–3 sav. pasiekiant palaikomąją (8 mg per dieną). Aštuntą parą po inksto transplantacijos ligonis tapo psichomotoriškai sujaudintas, išryškėjo regos haliucinacijos, santykio kliedesys, tapo dezorientuotas laike, bendradarbiavimo procesas buvo apsunkintas, mąstymas klampus, neproduktyvus. Pravesta diferencinė diagnostika: subarachnoidinės hemoragijos ir hipertenzinės krizės sukeltos encefalopatijos galimybė atmesta atlikus galvos kompiuterinę tomografiją. Po psichiatro konsultacijos diagnozuotas delyrinis sindromas. Gydymui skirta haloperidolio 5mg į raumenis. Būklei negerėjant haloperidolio dozė padidinta iki maksimalios 18 mg paros dozės, metilprednizolono dozė buvo ir toliau mažinama pagal protokolą. Toliau tęsiant gydymą antipsichotikais ir mažėjant gliukokortokoidų dozei, pamažu regresavo psichomotorinis sujaudinimas, išnyko dezorientacija ir kliedesinis sindromas.

Išvados. Pacientams, kuriems iki tol nebuvo nustatyta psichikos sutrikimų, po inkstų transplantacijos, net ir vartojant gliukokortikoidus pagal standartinę imunosupresijos schemą, gali išsivystyti delyrinis sindromas. Todėl būtina visus pacientus stebėti dėl šio nepageidaujamo vaistų poveikio, išmokyti juos ir jų artimuosius atpažinti psichikos sutrikimų simptomus bei paaiškinti, jog apie tai reikia pranešti gydytojui.

Raktiniai žodžiai: gliukokortikoidai, delyrinis sindromas, inkstų transplantacija, metilprednizolonas.

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Glucocorticoids are a commonly prescribed class of medication used to suppress the immune system and decrease inflammation. Since their introduction they became widely used to effectively treat a wide range of illnesses – allergies, connective tissue, skin, lung diseases, cancer and to prevent transplant rejection [1]. However, they have many adverse effects, which range from diabetes mellitus, osteoporosis and arterial hypertension to mental disorders. The real reasons for this are unknown, but there are several theories explaining this [2].

The main endogenous glucocorticoid, cortisol, is involved in glucose metabolism, inflammation, formation of immunity and a wide range of other organism functions related to stress. It also has effects on the activity of central nervous system. In hypothalamic – pituitary – adrenal axis this hormone is secreted during stress when hypothalamus produces corticotrophin – releasing factor that causes corticotrophin secretion from the anterior pituitary and subsequent release of cortisol from the adrenal glands [3]. It connects with mineralocorticoid receptors (MR) and glucocorticoid receptors (GR). Expressions of these receptors increase when cortisol is secreted in a response to stress [4]. MR is important to the onset of stress reaction, and GR finish response, promote recovery, memory and adaptation [5]. For this a balance between MR and GR in the brain is important. Synthetic glucocorticoids suppress endogenous secretion of glucocorticoids and activate only GR. That causes imbalance between MR and GR and could induce mental disorders [6]. However, even knowing the action mechanism of glucocorticoids and the consequences of their use, there are not always viable alternatives to change into. The described clinical case is just that, in which the protocol of transplantation was strictly followed in order to preserve the function of the transplanted kidney.

CLINICAL CASE

For a 49 year old man, after 1 year of chronic glomerulonephritis caused renal insufficiency, renal transplantation was scheduled. Illness was complicated with secondary third grade hypertension (peak blood pressure 230/120mmHg): used metoprolol 100 mg/day, telmisartan 80 mg/day, moxonidin 0,6 mg/day, doxazosin 4mg/day. For hyperphosphatemia correction the patient used calcium carbonicum. For renal anaemia – intravenous iron supplements, epoetin beta and folic acid.

There was no history of mental disorders and use of psychotropic drugs.

Before the transplantation standard induction of immunosuppression was given: intravenous methylprednisolone 250mg and mycophenolate mofetil 500 mg oral administration (Figure 1). After operation transplanted kidney started to function immediately. Standard postoperative immunosuppressive treatment according to the kidney transplantation protocol: calcineurin inhibitors (cyclosporine 4mg/kg/day, later in accordance to its concentration in blood), mycophenolate mofetil 1g x2/day and methylprednisolone 1mg per kilo (70mg), then gradually reducing the dose and in 2–3 weeks reaching maintenance dose (8mg/day) [7].

Postoperative period was complicated with difficult to manage arterial hypertension, which was treated in intensive care unit with sodium nitroprusside 30mg/d intravenous infusion, moxonidine 0,4mg/day. lercanidipine 10 mg/day., olmesartan 20 mg/day. and metoprolol 25mg/day. The patient has been using these drugs in the past. No mental disorders were diagnosed during that period. The newly prescribed drugs were methylprednisolone and mycophenolate mofetyl. Mycophenolate mofetyl has a known association with psychiatric symptoms [1]. Its adverse effects are inducing depression, insomnia and nervousness.

On the eighth day after kidney transplantation patient became psychomotorically agitated, visual hallucinations appeared (the patient was loudly speaking to presumed people around him), persecutory delusions (said that everyone is hostile against him), became disoriented in time (a few days off the calendar), cooperation process has been difficult (irritable, angry, answered the questions briefly, not immediately), thinking viscous, nonproductive.

Differential diagnosis was carried out: subarachnoid haemorrhage and hypertensive crisis induced encephalopathy was rejected after the head CT scan. After psychiatrist's consultation delirium syndrome was diagnosed. 5 mg of haloperidol was prescribed intramuscular injection for treatment. Since the phychiatric symptoms have not been improving, the dosage was increased up to maximum of 18 mg/day, methylprednisolone dose was further reduced according to the protocol. In continuing treatment with antipsychotics and decreasing glucocorticoid dosage, psychomotoric agitation, disorientation and delusion has been reduced. Antipsychotics for maintenance therapy were given and since mental

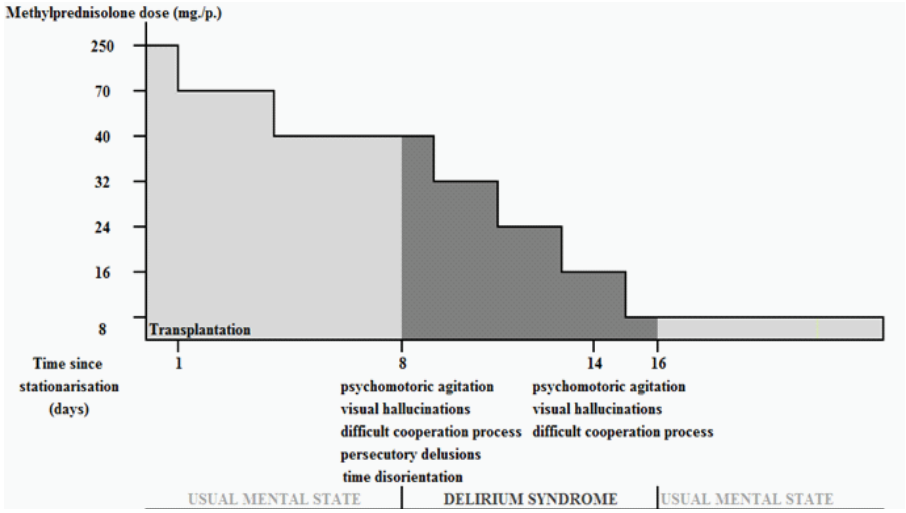

Figure 1. **Flow chart**

disorders were not reoccurring, 24-th day after transplantation, haloperidol was discontinued.

DISCUSSION

Methylprednisolone-induced delirium syndrome is quite rare in everyday clinical practice and that complicates quick diagnostics [8]. Further on is our case report comparison with the findings of other authors.

According to other sources, only 6% of glucocorticoid users suffer serious adverse psychiatric symptoms, including delirium [9]. Even more interesting is that appearance and severity of mental disorders not always depend on glucocorticoid dose. In 2006 described case hallucinations appeared after 15mg/d glucocorticoid prednisolone dose [10]. Judd et al. presented a case where 50 year old patient due to glomerulosclerosis was prescribed 10mg/day of prednisolone. Psychiatric disorders appeared as crowded thoughts and disorganized thinking. She was unable to drive and noted memory problems, which required multiple reminders for various responsibilities and appointments. Also had greater vulnerability to stress, sleeping disorders [11].

Delirium syndrome was differentiated from a several diseases. Hypertensive crisis induced encephalopathy can be suspected in patients, that have arterial blood pressure above 180/110mmHg. Common symptoms: difficult to manage hypertension, headache, nausea and vomiting led to suspect this pathology. However, during neurological examination changes were not found. Also in head CT scan pathological findings were not observed, so hypertensive encephalopathy was not confirmed.

Subarachnoid haemorrhage risk factor is high blood pressure. Common symptoms – headache and nausea occurred to the described patient. Symptoms appeared suddenly, were led by psychopathology, which could accompany most brain function disorders. But in head CT scan, no blood in subarachnoid crevices or ventricles was found; therefore subarachnoid hydrocephaly has been rejected.

Arterial hypertension is a cardiovascular disease risk factor; therefore the condition of the patient was differentiated from ischemic stroke. The patient had symptoms common to stroke-related ones: nausea and disorientation. However, there were no signs of an ischemic stroke on CT cranial scan.

Also, the condition has been differentiated from dementia. Common symptoms of it are behaviour disorders and disorientation. However, dementia manifests gradually and in this case symptoms became apparent within a short time and dementia is more common for people older than the described patient. Therefore, dementia has been dismissed.

Moreover, drug interactions were overviewed [1]. Even a few drugs could have had an adverse effect to mental health. Metoprolol and ranitidine could induce confusion and hallucinations. These adverse effects are very rare. Most psychiatric disorders could have been induced by methylprednisolone. Reducing the dose according to protocol reduced the delirium syndrome symptoms. In literature it is described that during the methylprednisolone treatment, adverse effects could occur between second day and second week of treatment (in this case – on the eighth day after first dose) [1].

Since glucocorticoids have strong side effects not only for the mental state but also for various organ systems, if there is any possibility, an alternative medication should be prescribed. Therefore, before using glucocorticoids, psychiatrist consultation is reasonable. If there are known psychiatric disorders diagnosed for the patient, glucocorticoids should be prescribed with more caution. All patients taking glucocorticoids should be considered as a delirium syndrome and other mental disorder risk group and should be closely monitored during medication and for some time afterwards. According to State Medicines Control Agency data, with the aim to stop psychiatric symptoms, not only the reduction of the glucocorticoid doses , but even a complete elimination of their use is sometimes necessary [1] together with further monitoring for new or worsening psychiatric symptoms. In case of severe psychiatric complications, glucocorticoid prescribing physician should consider consulting with a psychiatrist on that matter.

This article has revealed the difficulties that physicians face when treating complicated patients. Due to polypharmacotherapy and unstable state of the patient, even when consulting with physicians of other specialties, it is not always possible to rapidly diagnose the cause of occurring psychiatric disorders. Moreover, even though there are many potential cases in which glucocorticoids can induce one or another psychiatric disorder, there are no recent cases of delirium described.

CONCLUSIONS

To patients that had no previous psychiatric symptoms before kidney transplantation, even when using glucocorticoids according to standard immunosuppression scheme, delirium syndrome might occur. Therefore, it is essential to monitor all patients for this adverse effect and teach them and their family members to recognize the symptoms of mental disorders and explain that they should inform their physician about this.

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Nerimo, obsesinio-kompulsinio ir potrauminio streso sutrikimų farmakologinio gydymo pirminėje sveikatos priežiūros sistemoje rekomendacijos

Spausdinama *WFSBP*, Taylor & Francis, Lietuvos biologinės psichiatrijos draugijos leidimu.
Versta iš *The World Journal of Biological Psychiatry*, 2012; 16: 77–84 .

Borwin BANDELOW[1], Leo SHER[2], Robertas BUNEVICIUS[3], Eric HOLLANDER[2], Siegfried KASPER[4], Joseph ZOHAR[5], Hans-Jürgen MÖLLER[6], WFSBP psichikos sutrikimų pirminėje sveikatos priežiūros sistemoje Darbo grupė[a] ir WFSBP nerimo, obsesinio-kompulsinio, potrauminio streso sutrikimų gydymo rekomendacijų Darbo grupė[b]

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SANTRAUKA

Darbo tikslas. Pirminės sveikatos priežiūros sistemoje nerimo sutrikimai dažnai nediagnozuojami, nors bendrosios praktikos gydytojai galėtų šiuos sutrikimus veiksmingai gydyti. Metodai. Šis pranešimas yra trumpas ir praktiškas Pasaulinės biologinės psichiatrijos draugijų federacijos (angl. WFSBP) nerimo, obsesinio-kompulsinio sutrikimo (OKS) ir potrauminio streso sutrikimo (PTSS) farmakologinio gydymo pirminėje sveikatos priežiūros sistemoje rekomendacijų apibendrinimas. Rekomendacijas parengė Darbo grupė, sudaryta iš 30 tarptautinių šios srities ekspertų, ir pagrįstos atsitiktinių imčių kontroliuojamaisiais klinikiniais tyrimais.

Rezultatai. Šių sutrikimų pirmojo pasirinkimo vaistai yra selektyvūs serotonino reabsorbcijos inhibitoriai (visiems sutrikimams gydyti), serotonino ir noradrenalino reabsorbcijos inhibitoriai (kai kuriems sutrikimams) ir pregabalinas (tik generalizuotam nerimo sutrikimui). Įrodyta, kad kognityvinės elgesio, ekspozicijos terapijos ir vaistų derinys yra kliniškai pageidautinas gydymo būdas.

Išvados. Ši trumpa įrodymais pagrįstų Rekomendacijų versija gali pagerinti nerimo, OKS ir PTSS gydymą pirminės sveikatos priežiūros sistemoje.

Raktiniai žodžiai: nerimo sutrikimai, rekomendacijos, panikos sutrikimai, generalizuoto nerimo sutrikimas, socialinio nerimo sutrikimas, farmakologinis gydymas

ABSTRACT

Objective. Anxiety disorders are frequently under-diagnosed conditions in primary care, although they can be managed effectively by general practitioners. Methods. This paper is a short and practical summary of the World Federation of Biological Psychiatry (WFSBP) guidelines for the pharmacological treatment of anxiety disorders, obsessive – compulsive disorder (OCD) and posttraumatic stress disorder (PTSD) for the treatment in primary care. The recommendations were developed by a task force of 30 international experts in the field and are based on randomized controlled studies.

Results. First-line pharmacological treatments for these disorders are selective serotonin reuptake inhibitors (for all disorders), serotonin-norepinephrine reuptake inhibitors (for some) and pregabalin (for generalized anxiety disorder only). A combination of medication and cognitive behavior/exposure therapy was shown to be a clinically desired treatment strategy. Conclusions. This short version of an evidence-based guideline may improve treatment of anxiety disorders, OCD, and PTSD in primary care.

Keywords: anxiety disorders, guidelines, panic disorder, generalized anxiety disorder, social anxiety disorder, pharmacological treatment.

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ĮVADAS

Pirminės sveikatos priežiūros sistemoje nerimo sutrikimai dažnai nediagnozuojami, nors bendrosios praktikos gydytojai galėtų šiuos sutrikimus veiksmingai gydyti. Pasaulio sveikatos organizacija (PSO) ir Amerikos psichiatrų asociacija (APA) parengė specifines psichikos sutrikimų diagnostikos pirminės sveikatos priežiūros sistemoje rekomendacijas. Šis pranešimas papildomas įrankis – glaustas ir patogus Diagnostikos vadovas, parengtas bendrosios praktikos gydytojui. Tai trumpa ir praktiška WFSBP rekomendacijų dėl nerimo sutrikimų, obsesinio-kompulsinio sutrikimo (OKS) ir potrauminio streso sutrikimo gydymo (PTSS) santrauka, kurios tikslas – informuoti apie šiuolaikinių vaistų skyrimą, gydant nerimo sutrikimus įtemptomis pirminės sveikatos priežiūros sistemos sąlygomis.

Per pastarąjį dešimtmetį nerimo sutrikimų paplitimas išliko stabilus (apie 29 proc.). Pacientams, turintiems nerimo sutrikimų, dažnai teikiamos skubiosios bei pirminės medicininės paslaugos ir jie siejami su didele savižudybės bei piktnaudžiavimo narkotinėmis medžiagomis rizika.

Dabartinė nerimo sutrikimų samprata apima specifinio neurobiologinio pažeidžiamumo (genetinio, nepalankių vaikystės sąlygų) ir aplinkos veiksnių sąveiką. Nerimo sutrikimai siejami su serotonino, noradrenalino ir kitų neurotransmiterių sistemų disfunkcija.

GYDYMAS

WFSBP Darbo grupė atliko kompiuterizuotą literatūros paiešką, siekiant identifikuoti visus tinkamus tyrimus, rodančius gydymo pranašumą prieš placebą ir pranašumą arba lygiavertį gydomąjį poveikį lyginant su skirtu lyginamuoju vaistu. Tyrimų metodika turėjo tenkinti tam tikrus kokybinius reikalavimus. Įrodymų kategorijos, pagrįstos sistemine 510 atsitiktinių imčių kontroliuojamųjų tyrimų analize, aprašytos 1 lentelėje. Rekomendacijų klasės parengtos vaistų veiksmingumo įrodymų ir jų keliamos rizikos santykiu (pavyzdžiui, benzodiazepinai yra A įrodymų kategorijoje, tačiau patenka į 2 rekomendacijų klasę dėl piktnaudžiavimo jais galimybės).

Gydymas indikuotinas daugumai pacientų, atitinkančių PSO Tarptautinės ligų klasifikacijos (TLK-10) arba APA Diagnostikos ir statistikos vadovo (DSM-IV-TR) nerimo sutrikimo, OKS arba PTSS kriterijus (2 lentelė). Gydymo planas sudaromas atsižvelgiant į paciento pageidavimus, sutrikimo sunkumą, bendrąjį sergamumą, gretutines ligas, komplikacijas, pvz., piktnaudžiavimas narkotinėmis medžiagomis arba savižudybės rizika, ankstesnį gydymą, gydymo išlaidas ir gydymo būdų prieigą konkrečioje vietovėje. Gydymo galimybės apima vaistų skyrimą ir psichologinę terapiją. Prieš pradedant gydyti vaistais, pacientui turėtų būti paaiškintas mechanizmas, sukeliantis psichinį ir somatinį nerimą (brošiūros, paaiškinančios paciento būklei būdingus požymius, gydymo galimybes ir nepageidaujamus vaistų poveikius). Pacientas laikysis gydymo rėžimo, jeigu jam bus išsamiai paaiškinta apie vaistų privalumus ir trūkumus.

Pasiekus remisiją, gydymas turėtų būti tęsiamas mažiausiai 6–24 mėn., siekiant sumažinti atkryčio riziką ir tik po to, kai visi arba beveik visi simptomai išnyksta, gydymą galima nutraukti.

Gydymas vaistais. Prieinami medikamentai

Selektyvūs serotonino reabsorbcijos inhibitoriai (SSRI), serotonino ir noradrenalino reabsorbcijos inhibitoriai (SNRI) ir pregabalinas dėl palankaus rizikos ir naudos santykio yra pirmojo pasirinkimo vaistai, kurių skyrimas skiriasi gydant įvairius nerimo sutrikimus.

SSRI. SSRI indikuotini nerimo sutrikimams, OKS ir PTSS gydyti. Nors SSRI yra gerai toleruojami, nerimas, drebulys, sustiprėję nerimo simptomai, nemiga arba galvos skausmas per pirmąsias gydymo dienas arba savaites gali kliudyti laikytis

Table 1. **Įrodymų kategorijos ir rekomendacijų klasės (3 lentelėje įrodymų kategorijos pateikiamos visiems rekomenduojamiems vaistams). Įrodymų ir rekomendacijų klasių apibūdinimas, žr. [1].**

Įrodymų kategorija	Aprašymas
A	Įrodyta kontroliuojamaisiais tyrimais
B	Kontroliuojamųjų tyrimų riboti teigiami įrodymai
C	Nekontroliuojamųjų tyrimų įrodymai arba atvejų aprašymai, ekspertų nuomonės
C1	Nekontroliuojamieji tyrimai
C2	Atvejų aprašymai
C3	Remiasi šios srities ekspertų nuomone arba klinikine patirtimi
D	Nepastovūs rezultatai
E	Neigiami įrodymai
F	Įrodymų trūkumas
Rekomendacijų klasės	Pagrįstos
1	Kategorijos A įrodymai bei rizikos ir naudos santykis
2	A kategorijos įrodymai bei vidutinis rizikos ir naudos santykis
3	B kategorijos įrodymai
4	C kategorijos įrodymai
5	D kategorijos įrodymai

Table 2. **Trumpas nerimo sutrikimų aprašymas, kaip apibrėžta TLK-10 [2] ir DSM-IV-TR [3]**

Panikos sutrikimas (PS)
Panikos sutrikimas apibūdinamas kaip pasikartojantys panikos priepuoliai. Panikos priepuoliai – tai atskiri intensyvūs baimės arba diskomforto epizodai, kartu ne mažiau kaip keturi somatiniai ir psichikos simptomai (smarkus širdies plakimas, prakaitavimas, drebulys, dusulys, smaugimo jausmas, krūtinės skausmas, pykinimas, pilvo skausmas, diskomforto jausmas, galvos svaigimas, mirties baimė ir kt.). Panikos priepuolis pasiekia kulminaciją per 10 min. ir vidutiniškai tęsiasi 30–45 min. Dažnai pacientas bijo, kad jis turi sunkių sveikatos sutrikimų, pvz., miokardo infarktą
Agorafobija
Apie du trečdaliai pacientų, turinčių panikos sutrikimų, kenčia nuo agorafobijos, kuri apibrėžiama kaip baimė atsidurti vietose arba situacijose, iš kurių ištrūkti gali būti sunku arba kur pagalba gali būti neprieinama, jeigu ištiktų netikėtas panikos priepuolis. Šioms situacijoms priskiriama: buvimas minioje arba stovėjimas eilėje, buvimas vienam ne namuose arba kelionė autobusu, traukiniu, automobiliu. Tokių situacijų yra vengiama arba jos išgyvenamos su akivaizdžiu nerimu.
Generalizuotas nerimo sutrikimas (GNS)
Pagrindiniai generalizuoto nerimo sutrikimo požymiai yra pernelyg stiprus nerimas ir rūpestis. Pacientai kenčia nuo somatinių nerimo simptomų, taip pat neramumo, dirglumo, sunkumo susikaupti, raumenų įtampos, miego sutrikimų ir greito nuovargio. Pacientas gali skųstis nuolatine baime, kad jis arba giminaitis netrukus susirgs arba įvyks nelaimingas atsitikimas.
Specifinės fobijos
Specifinėms fobijoms būdinga perdėta arba nepagrįsta tam tikrų objektų arba situacijų baimė (pvz., skrydis lėktuvu, aukštis, gyvūnai, kraujo matymas ir kt.).
Socialinė fobija (socialinio nerimo sutrikimas, SNS)
Šiam sutrikimui būdinga stipri, nuolatinė ir nepagrįsta baimė būti kitų stebimam arba neigiamai įvertintam socialinėse situacijose ir tai susiję su somatiniais bei pažinimo funkcijų sutrikimais. Tokių situacijų vengiama arba jos išgyvenamos su intensyviu nerimu, net kančia. Tokios situacijos apima baimę viešai kalbėti, kalbėjimą su nepažįstamais žmonėmis arba buvimą tarp žmonių, kurie galimai apžiūrinėja.
Obsesinis-kompulsinis sutrikimas (OKS)
OKS būdingos pasikartojančios obsesijos arba kompulsijos, arba abu – tai sukelia distresą, laiko trūkumą ir kliudo funkcionuoti. Labiausiai paplitusios obsesijos yra nerimas dėl taršos, žalos, draudimo kaupti atsargas, taip pat seksualiniai, somatiniai bei religiniai rūpesčiai. Kompulsijos apima plovimą, tikrinimą, atkartojimą, organizavimą, skaičiavimą, kaupimą ir lietimą (retai).
Potrauminis streso sutrikimas (PTSS)
PTSS atsiranda po skaudžios patirties, kai buvo padaryta fizinė žala arba grėsė fizinė žala. Žmogus, kuriam pasireiškia PTSS, gali būti tas, kuris patyrė sužalojimą arba žalą galėjo patirti mylimas žmogus, arba asmuo galėjo stebėti žalingą įvykį, kurį patyrė artimieji arba nepažįstami žmonės. Šiai būklei būdingi pasikartojantys ir nepageidaujami prisiminimai apie įvykį, košmarai, įvykio išgyvenimas per iliuzijas, haliucinacijas arba disociatyvūs praeities epizodo prisiminimai, intensyvus psichologinis arba fiziologinis nerimas po užuominų apie panašų atvejį, siekimas išvengti dirgiklių, susijusių su patirta trauma, negebėjimas prisiminti svarbių traumos aspektų, susidomėjimo praradimas, nutolimas nuo kitų, miego sutrikimai, dirglumas, sunkumas susikaupti, padidėjęs budrumas. Visi simptomai išlieka ilgiau kaip vieną mėnesį.

gydymo režimo. Sumažinus SSRI pirminę dozę, per didelis stimuliavimas gali sumažėti. Kiti nepageidaujami poveikis yra pykinimas (todėl rekomenduojama vaistą vartoti po valgio), galvos skausmas, nuovargis ir galvos svaigimas. Anksiolitinis poveikis gali vėluoti 2–4 savaites (kai kuriais atvejais – 6 arba 8 savaites). Ilgalaikio gydymo šalutiniu poveikiai gali būti lytinė disfunkcija ir svorio prieaugis.

SNRI. Nerimą mažinamasis poveikis, vartojant SNRI, gali vėluoti 2–4 savaites. Gydymo pradžioje panašiai kaip ir SSRI skyrimo atveju šalutiniai poveikiai, pvz., pykinimas, nerimas, nemiga arba galvos skausmas gali kelti grėsmę gydymo režimo laikymuisi. Gali atsirasti lytinė disfunkcija, nutraukimo sindromas, padidėjęs kraujo spaudimas ir kiti šalutiniai poveikiai. Nėra pakankamai įrodymų dėl SNRI skyrimo OKS gydyti.

Pregabalinas. Daugeliu GNS tyrimų įrodutas kalcio kanalų moduliatoriaus pregabalino veiksmingumas. Anksiolitinis vaisto poveikis susijęs su jungimusi prie įtampos valdomų kalcio kanalų baltymo α2-δ-subvieneto centrinės nervų sistemos audiniuose. Šis jungimasis sumažina kalcio įtekėjimą nervų terminalėse ir moduliuoja neurotransmiterių atpalaidavimą. Pagrindiniai šalutiniai poveikiai yra galvos svaigimas ir sedacija. Vaisto poveikis pasireiškia per pirmąsias gydymo dienas ir tai lemia šio vaisto pranašumą prieš antidepresantus.

TCA. Įrodytas TCA, daugiausia imipramino ir klomipramino, veiksmingumas panikos sutrikimui ir generalizuotam nerimo sutrikimui gydyti. Tačiau TCA nebuvo sistemingai ištirtas socialinio nerimo sutrikimui gydyti. Gydymo režimo laikymasis gali būti problemiškas dėl vaistų šalutinių poveikių, tokių, kaip sedacija, užsitęsęs reakcijos laikas, burnos džiūvimas, obstipacijos ir svorio prieaugis. Farmakokinetinės sąveikos gali riboti jų skyrimą pacientams, vartojantiems ir kitus medikamentus. Tačiau svarbiausia atsižvelgti į šių vaistų potencialiai mirtiną poveikį perdozavimo atveju dėl galimo toksiškumo širdžiai ir CNS. Todėl nereikėtų skirti TCA pacientams, turintiems suicidinių minčių. Be to, nepageidaujamų reiškinių dažnis apskritai didesnis vartojant

TCA, nei naujesnius antidepresantus, pvz., SSRI arba SNRI. Taigi, pirmiausia reikėtų išbandyti pastaruosius vaistus prieš pradedant vartoti TCA.

Benzodiazepinai. Anksiolitinis poveikis pasireiškia per keletą minučių išgėrus vaisto arba pavartojus parenteraliai. Svarbiausia – jie yra gana saugūs. Dėl CNS slopinimo gydymas benzodiazepinais gali būti susijęs su sedacija, galvos svaigimu ir lėtesne reakcija. Todėl vaistų vartojimas gali turėti įtakos pažinimo funkcijoms ir vairavimo įgūdžiams. Po kelių savaičių ar mėnesių nepertraukiamo gydymo benzodiazepinais didelei daliai ligonių gali atsirasti mažų dozių priklausomybė. Pacientai, kurie ankščiau piktnaudžiavo benzodiazepinais, alkoholiniais gėrimais arba kitomis psichoaktyviomis medžiagomis, iš esmės neturėtų būti gydomi šiais vaistais arba šie pacientai turėtų būti stebimi specializuotose priežiūros įstaigose. Benzodiazepinai gali būti vartojami kartu su serotoninerginiais vaistais slopinti padidėjusį nerimą pirmosiomis gydymo savaitėmis. Apskritai benzodiazepinus reikia vartoti reguliariai. Tik trumpalaikio distreso metu (pvz., skraidant lėktuvu, turint dantų gydymo fobiją) galimas gydymas „pagal reikalą“ (kai tai būtina). Reikėtų žinoti, jog benzodiazepinai veiksmingi gydant ūminį streso sutrikimą ir tokias gretutines ligas, kaip, depresija arba OKS.

Antihistamininiai vaistai. Antihistamininis vaistas hidroksizinas yra veiksmingas gydant generalizuotą nerimo sutrikimą. Dėl sedacinio poveikio antihistamininiai vaistai turėtų būti vartojami tik tada, kai gydymas kitais vaistais buvo nesėkmingas arba vaistai netoleruojami. Šalutiniai poveikiai yra sedacija, anticholinerginis poveikis, vartojant didelėmis dozėmis, neryškus matymas, sumišimas, delyras ir kt. Kai sedacija yra pageidaujama, antihistamininiai vaistai yra geresnis pasirinkimas nei benzodiazepinai.

Atipiniai antipsichoziniai vaistai. Keleto tyrimų metu tokie atipiniai antipsichoziniai vaistai, kaip quetiapinas buvo vartojami monoterapija generalizuotam nerimo sutrikimui gydyti arba kaip papildomas vaistas nesant pageidaujamo gydymo atsako nerimo sutrikimų, OKS ir PTSS atvejais. Šalutiniai atipinių antipsichozinių vaistų poveikiai: sedacija, ortostatinė hipotenzija, lytinė disfunkcija, metabolinis sindromas, ekstrapiramidinis poveikis ir kt. Vis dėlto daugelyje šalių atipiniai antipsichoziniai vaistai nelicencijuoti kaip tinkami minėtiems sutrikimams gydyti. Todėl šiuos vaistus pacientas gali vartoti prižiūrimas specialisto.

DOZAVIMAS

Maždaug 75 proc. pacientų būdingas atsakas į pirminę mažą antidepresantų dozę (išskyrus OKS). Kai kuriems pacientams, pvz., pagyvenusio amžiaus, gydymas turi būti pradedamas skiriant pusę rekomenduojamos dozės arba mažiau siekiant sumažinti pradinius nepageidaujamus vaisto poveikius. Be to, pacientai, turintys panikos sutrikimą, gali būti jautrūs serotoninerginei stimuliacijai ir gali nutraukti gydymą dėl pradinio drebulio ir nervingumo. Triciklius antidepresantus (TCA) rekomenduojama pradėti skirti maža doze ir didinti dozę kas 3–5 dienas. Antidepresantų dozė turėtų būti padidinta iki didžiausios rekomenduojamos terapinės dozės, jei pradinis gydymas maža arba vidutine doze neveiksmingas. OKS atveju rekomenduojamos vidutinės ir didelės antidepresantų dozės. Jei farmakokinetiniai duomenys leidžia vienos dozės per parą vartojimą, toks medikamentų vartojimas skatina gydymo režimo laikymąsi. Pacientams, kurių kepenų funkcija sutrikusi, gali prireikti dozės koregavimo arba pirmiausia per inkstus išskiriamų vaistų (pvz., pregabalino). Jei atsako į gydymą nėra, skiriant pakankamas dozes 4–6 savaites (8–12 savaičių OKS arba PTSS atvejais), vaistai turėtų būti keičiami arba svarstoma psichiatro konsultacijos galimybė.

Pacientams, kuriems standartinis gydymas neveiksmingas, galimi alternatyvūs gydymo pasirinkimai, tokie kaip, antidepresinio gydymo papildymas antipsichoziniu vaistu OKS atveju (žr. [1]).

Nesant atsako į vartojamus vaistus, papildomas kognityvinės elgesio terapijos skyrimas (KET) gali būti sėkmingas.

NEFARMAKOLOGINIS GYDYMAS

Visiems pacientams, turintiems nerimo sutrikimų, reikia paramos. Psichologiniai ir farmakologiniai gydymo būdai dažnai skiriami kartu, o ne kaip alternatyvūs. Ekspozicijos terapija (pvz., laipsniška in vivo ekspozicija, angl. „flooding“) ir atsako prevencija labai veiksmingos specifinei fobijai, agorafobijai, socialinei fobijai ir OKS gydyti. Tačiau tokie metodai, kaip, ekspozicija ir atsako prevencija susiję su dideliu gydymo atsisakymo ir gydymo nutraukimo dažniu dėl nemalonių potyrių sesijos metu ir išankstinio nerimo. Paprastai pacientai turėtų būti siunčiami patyrusiems psichoterapeutams oficialiai psichoterapijai, tačiau gydytojai, dirbantys pirminės sveikatos priežiūros sistemoje, taip pat gali padėti savo pacientams, palaikydami juos, teikdami „psichoedukacines“ konsultacijas ir ragindami nevengti baimę keliančių situacijų. Renkantis tarp medikamentų ir KET, sprendimą lemia keletas veiksnių, ypač paciento pageidavimai, gydymo galimybės, šalutiniai vaisto poveikiai, atsako greitis, bendrasis sergamumas (pvz., depresija), finansiniai aspektai, ligonio skiriamas laikas ir suinteresuotumas, prieiga prie psichiatrinio ir psichologinio gydymo išteklių, taip pat gydytojo kvalifikacija ir patirtis.

SPECIALIOSIOS GYDYMO REKOMENDACIJOS ĮVAIRIEMS NERIMO SUTRIKIMAMS

3 lentelėje pateikiamos apibendrintos gydymo rekomendacijos skirtingiems nerimo sutrikimams. Kai kurie anksiolitikai efektyvūs visiems nerimo sutrikimams gydyti, tačiau dalis vaistų buvo tiriami gydant specifinius nerimo sutrikimus, taigi, turėtų būti vartojami tik šių sutrikimų atvejais.

Panikos sutrikimai ir agorafobija. Ūminio panikos priepuolio metu paciento nuraminimas gali būti pakankamas daugeliu atveju. Sunkių priepuolių metu gali prireikti trumpo veikimo benzodiazepino (pvz., tirpių tablečių). SSRI ir venlafaksinas yra pirmojo pasirinkimo vaistas panikos sutrikimui gydyti. Pasiekus remisiją, gydymas turėtų būti tęsiamas mažiausiai keletą mėnesių, siekiant išvengti atkryčių. Įrodyta, kad SSRI, venlafaksinas, TCA, benzodiazepinai ir kiti vaistai pasižymi ilgalaikiu veiksmingu poveikiu. Gydant SSRI ir SNRI, tos pačios dozės paprastai skiriamos tiek palaikomajam gydymui, tiek ūminės gydymo fazės metu.

Nustatyta, kad geriausių gydymo rezultatų pasiekiama skiriant KET ir medikamentinio gydymo derinį. Ekspozicijos terapija taikoma agorafobijai gydyti, o KET buvo plačiai taikoma gydant savaiminius panikos priepuolius. Panašu, kad mankštinimasis šiek tiek veiksmingas panikos sutrikimų

Table 3. **Nerimo sutrikimų ir OKS medikamentinio gydymo rekomendacijos. Dienos dozė mg (atskirta skliaustais: įrodymų kategorijos ir rekomendacijų klasės, žr. 1 lentelę)**

Medikamentai	Panikos sutrikimas	Generalizuotas nerimo sutrikimas	Socialinio nerimo sutrikimas	Obsesinis-kompulsinis sutrikimas	Potrauminis streso sutrikimas
Selektyvūs serotonino reabsorbcijos inhibitoriai (SSRI)					
Citalopramas	20–60 (A; 1)		20–40 (B; 3)		
Escitalopramas	10–20 (A; 1)	10–20 (A; 1)	10–20 (A; 1)	10–20 (A; 1)	
Fluoksetinas	20–40 (A; 1)		20–40 (D; 5)	20–60 (A; 1)	20–40 (A; 1)
Fluvoksaminas	100–300 (A; 1)		100–300 (A; 1)	100–300 (A; 1)	
Paroksetinas	20–60 (A; 1)	20–50 (A; 1)	20–50 (A; 1)	20–60 (A; 1)	20–40 (A; 1)
Sertalinas	50–150 (A; 1)	50–150 (A; 1)	50–150 (A; 1)	50–200 (A;1)	50–100 (A; 1)
Serotonino ir noradrenalino reabsorbcijos inhibitoriai (SNRI)					
Venlafaksinas	75–225 (A; 1)	75–225 (A; 1)	75–225 (A; 1)		75–225 (A; 1)
Duloksetinas		60–120 (A; 1)			
Tricikliai antidepresantai					
Amitriptilinas					75–200 (B; 3)
Klomipraminas	75–250 (A; 2)			75–300 (A; 2)	
Imipraminas	75–250 (A; 2)				75–200 (B; 3)
Kalcio kanalų moduliatoriai					
Pregabalinas		150–600 (A; 1)			
Gabapentinas			600–3,600 (B; 3)		
MAO inhibitoriai					
Fenelzinas	45–90 mg (B; 3)		45–90 (A; 2)	45–90 (D; 5)	45–90 (D; 5)
Grįžtamojo poveikio monoaminoksidazės A inhibitoriai (angl. RIMA)					
Moklobemidas			300–600 (D; 5)		
Benzodiazepinai					
Alprazolamas	1,5–8 (A; 2)				
Klonazepamas	1–4 (A; 2)		5–20 (A; 2)		
Diazepamas	2–8 (A; 2)	5–15 (A; 2)			
Lorazepamas	2–8 (A; 2)	1,5–8 (B; 3)			
Netipiniai antipsichoziniai					
Quetiapinas		50–300 (A; 1)			
Risperidonas					0,5–6 (B; 3)
Tricikliai anksiolitikai					
Opipramolis	50–150 (B;3)				
Azapironas					
Buspironas		15–60 (D; 5)			
Noradrenerginiai ir specifiniai serotoninerginiai antidepresantai (NasSA)					
Mirtazapinas				30–60 (B; 3)	30–60 (B; 3)
Antihistamininis					
Hidroksizinas		37,5–75 (A;2)			

Santrumpos. Nurodyti vaistai ne visose šalyse yra patvirtinti šių ligų gydymui; remtis gyvenamosios vietos vaistų skyrimo tvarka.

atveju, tačiau šis poveikis silpnesnis nei vaistų.

Generalizuotas nerimo sutrikimas (GNS). Pirmojo pasirinkimo vaistai GNS atveju yra SSRI, SNRI ir pregabalinas. Kiti galimi vaistai yra buspironas ir hidroksizinas. Benzodiazepinai ilgalaikiam gydymui turėtų būti vartojami tik tada, kai kiti vaistai arba KET buvo neveiksmingi.

KET bei panašūs būdai naudoti generalizuoto nerimo sutrikimo metu kaip psichologinis gydymo būdas. KET remiasi pažinimo modeliais, pabrėždama susirūpinimo vaidmenį, metakogniciją ir vengiantį elgesį.

Socialinio nerimo sutrikimas (SNS). Pirmojo pasirinkimo vaistai yra SSRI ir venlafaksinas. Dėl benzodiazepinų vartojimo SNS patikimų įrodymų nėra. Negrįžtamojo poveikio monoamino oksidazės inhibitorius fenelzinas gali būti pasirenkamas nesant atsako į gydymą. Apskritai, SNS yra lėtinis sutrikimas, todėl reikalingas ilgalaikis gydymas.

Įrodyta, kad ekspozicijos terapija ir KET yra veiksmingos.

Specifinė fobija. Paprastai pacientai, turintys specifinių fobijų, nesikonsultuoja su medicinos specialistais, ypač tais atvejais, jei jie gali susitvarkyti su savo fobijomis, vengdami specifinių situacijų arba objektų, kurie sukelia baimę. Ekspozicijos terapija yra veiksmingas specifinių fobijų gydymo būdas. Psichofarmakologiniai vaistai nėra pripažįstami kaip standartinis gydymo būdas lengvais konkrečių fobijų atvejais. Sunkiais atvejais gali būti vartojami SSRI.

Obsesinis-kompulsinis sutrikimas (OKS). Pirmojo pasirinkimo vaistai yra SSRI ir TCA klomipraminu. Rekomenduojama vartoti vidutines ir didesnes dozes (nors įrodymai dėl atsako priklausomybės nuo SSRI ir klomipramino dozės, gydant OKS yra prieštaringi). OKS reikalauja ilgalaikio gydymo veiksmingomis dozėmis („Dozė, kurią vartodamas jautiesi gerai, reikalinga palaikyti tokią savijautą“). Jei atsako į gydymą nėra, reikėtų apsvarstyti psichiatro konsultacijos galimybę. Sunkiais OKS atvejais, kai nesėkmingai išbandyti visi esami gydymo metodai, galimas giliosios smegenų stimuliacijos taikymas.

Potrauminis streso sutrikimas (PTSS). Pirmojo pasirinkimo vaistai yra SSRI ir venlafaksinas. PTSS dažnai yra lėtinis sutrikimas ir reikalauja ilgalaikio gydymo mažiausiai 12–24 mėn. Įrodytas SSRI fluoksetino ir sertralino bei SNRI venlafaksino ilgalaikis veiksmingumas.

Tik maža dalis žmonių (10–20 proc.), kurie patyrė sunkias traumas, patiria PTSS. Pirmą mėnesį po traumos šiuo metu rekomenduojama laikytis trijų N principo: Neieškok patologijos (Tai normalus atsakas į nenormalią situaciją). Neinterpretuok psichologiniais metodais (nelengvink emocinės reakcijos grupinėje terapijoje arba psichologiniu instruktažu). Neskirk vaistų (nėra patikimų įrodymų, kad profilaktinis medikamentų vartojimas gali užkirsti kelią išsivystyti PTSS). KET indikuotinas tik praėjus keliems mėnesiams po traumos ir tiems pacientams, kuriems jau išsivystė PTSS. Psichologinis instruktažas (terapinis pokalbis su pacientu, kuris ką tik patyrė traumą siekiant užkirsti kelią PTSS) ir benzodiazepinai yra kontraindikuotini per pirmąsias valandas po traumos, nes tai gali kliudyti savaiminio pasveikimo procesui.

SPECIFINIŲ ATVEJŲ GYDYMAS

Nėštumas. Skiriant nerimo sutrikimo gydymą neštumo laikotarpiu, reikėtų palyginti vaisto vartojimo riziką su rizika nevartojant vaisto. Daugumos tyrimų duomenimis SSRI ir TCA nėštumo laikotarpiu nedidina apsigimimų rizikos. Rekomenduojama vengti paroksetino, alprazolamo vartojimo nėščiosioms arba moterims, kurios planuoja pastoti.

Žindymas. SSRI ir TCA patenka į motinos pieną ir mažos koncentracijos buvo rastos kūdikių serume. SSRI paroksetino ir sertralino žindomo kūdikio plazmoje paprastai nerandama. Motinoms, kurios vartojo SSRI ir TCA (išskyrus doksepiną), atrodo, nepagrįsta rekomenduoti žindymo nutraukimo. Kol motina gydoma benzodiazepinais, kūdikis turi būti stebimas dėl sedacijos, mieguistumo, blogo žindymo ir svorio kritimo. Jei motina turi vartoti dideles dozes ir ilgai, žindymas tikriausiai turėtų būti nutraukiamas.

Vaikų ir paauglių gydymas. Farmakologinio gydymo patirtis vaikų ir paauglių nerimo sutrikimų atvejais rodo, kad SSRI turi būti pirmojo pasirinkimo vaistai. Tačiau pasirodė perspėjimų, kad vartojant SSRI,didėja savižudiškų minčių ir smurtinio elgesio rizika. Pacientus reikėtų atidžiai stebėti dėl galimo diagnostikos neapibrėžtumo ir dėl gretutinės depresijos.

Pagyvenusio amžiaus pacientų gydymas. Veiksniai, į kuriuos turėtų būti atsižvelgiama gydant vyresnio amžiaus žmones, yra padidėjęs jautrumas anticholinerginiam vaistų poveikiui, padidėjusi ortostatinės hipotenzijos rizika, EKG pokyčiai gydant TCA bei galima paradoksali reakcija į benzodiazepinus – tai depresija su (be) polinkiu į savižudybę, baimę, agresyvumą arba smurtinį elgesį. Todėl gydymas TCA arba benzodiazepinais yra mažiau palankus nei SSRI, kurie, atrodo, yra saugūs.

Pacientų gydymas sunkių somatinių ligų atvejais. Pacientai, sergantys širdies ir kraujagyslių sistemos, smegenų kraujagyslių ir endokrininėmis ligomis, gali išgyventi adekvačias ir pagrįstas nerimo reakcijas, susijusias su jų somatinių ligų būkle. Jie gali turėti ir gretutinių pirminių nerimo sutrikimų. Tokie nerimo sutrikimai, manoma, sunkina lėtinės obstrukcinės plaučių ligos, vainikinių arterijų ligų arba miokardo infarkto, cukrinio diabeto arba smegenų pažeidimų gydymą ir prognozę. Nerimo simptomai gali būti ir kitų medicininių būklių, tokių kaip, hipertiroidizmas pasekmė.

TCA turėtų vengti pacientai, sergantys širdies ir kraujagyslių sistemos ligomis. Priešingai, SSRI turi nedidelį poveikį širdies ir kraujagyslių sistemos funkcijai (nors didesnės citalopramo ir escitalopramo dozės siejamos su QT c prailgėjimu) ir galimai turi palankų poveikį trombocitų agregacijai. Venlafaksinas paprastai gerai toleruojamas, bet pacientams, sergantiems hipertenzija, turėtų būti stebimas kraujo spaudimas.

Kada pacientas turėtų būti prižiūrimas specialisto?

Pacientas turėtų būti siunčiamas specialisto priežiūrai, kai atsako į gydymą nebuvo po dviejų gydymo kursų pirmojo pasirinkimo vaistais, kai nerimo sutrikimas komplikuotas alkoholio vartojo arba piktnaudžiavimu kitomis narkotinėmis medžiagomis, kai sutrikimas iš esmės trukdo paciento socialinėms ir profesinėms funkcijoms arba esant antrinei depresijai arba polinkiui į savižudybę.

IŠVADOS

Pacientai, turintys nerimo sutrikimų, obsesinį-kompulsinį sutrikimą ir potrauminį streso sutrikimą, gali būti veiksmingai gydomi pirminės sveikatos priežiūros specialistų. Tinkamai

gydant, šiuos sutrikimus turinčių pacientų gyvenimo kokybė gali žymiai pagerėti. Įrodyta, kad KET ir medikamentų deriniu pasiekia geresnius gydymo rezultatų.

Tai yra tik rekomendacijos. Griežtas jų laikymasis neužtikrina sėkmingo gydymo. Rekomendacijos pagrįstos atsitiktinių imčių kontroliuojamaisiais tyrimais, todėl patikimų įrodymų nėra. Individualus paciento gydymas turėtų būti planuojamas atsižvelgiant į klinikinius paciento požymius ir prieinamus diagnostikos bei gydymo būdus.

SVARBIAUSI ASPEKTAI

- Ši trumpa įrodymais pagrįstų rekomendacijų versija gali pagerinti nerimo sutrikimų, OKS ir PTSS gydymą pirminės sveikatos priežiūros sistemoje.
- Šių sutrikimų pirmojo pasirinkimo vaistai yra selektyvūs serotonino reabsorbcijos inhibitoriai (visiems sutrikimams gydyti), serotonino ir noradrenalino reabsorbcijos inhibitoriai (kai kuriems sutrikimams) ir pregabalinas (tik generalizuotam nerimo sutrikimui).
- Įrodyta, kad kognityvinės elgesio, ekspozicijos terapijos ir vaistų derinys yra kliniškai pageidautinas gydymo būdas.
- Rekomendacijos pagrįstos atsitiktinių imčių kontroliuojamaisiais tyrimais, todėl patikimų įrodymų stinga.

PADĖKA

Nėra

INTERESŲ KONFLIKTAS

Šių rekomendacijų rengimas nebuvo remiamas jokios farmacinės kompanijos.

Borwin Bandelow per trejus metus priėmė dotacijas, paramą tyrimui, konsultavimo išlaidas ir honorarus iš Astra- Zeneca, Bristol-Myers-Squibb, Glaxo-SmithKline, Jazz, Merck, Lilly, Lundbeck, Ono Pharma, Otsuka, Pfi zer and Servier. Robertas Bunevicius per trejus metus priėmė dotacijas, paramą tyrimui, konsultavimo išlaidas ir honorarus iš Lundbeck, AstraZeneca, Teva. Eric Hollander per pastaruosius metus priėmė dotacijas, paramą tyrimui, konsultavimo išlaidas ir honorarus iš Abbott BMS, Janssen, Nastech, and Neuropharm. Joseph Zohar per trejus metus priėmė dotacijas, paramą tyrimui, konsultavimo išlaidas ir honorarus iš Glaxo-Smith Kline, Lundbeck, Pfizer, Servier, Teva and Wyeth. Siegfried Kasper per trejus metus priėmė dotacijas, paramą tyrimui, konsultavimo išlaidas ir honorarus iš AstraZeneca, Bristol-Myers Squibb, CSC, Eli Lilly, GlaxoSmithKline, Janssen Pharmaceutica, Lundbeck, MSD, Novartis, Organon, Pierre Fabre, Pfi zer, Schwabe, Sepracor, Servier, Wyeth. Hans-Jürgen Möller per pastaruosius metus priėmė dotacijas, paramą tyrimui, konsultavimo išlaidas ir honorarus iš AstraZeneca, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Janssen Cilag, Lundbeck, MSD, Novartis, Organon, Otsuka, Pfi zer, Schwabe, Sepracor, Servier, and Wyeth. Leo Sher: nėra nieko atskleidimui.

Rekomendacijas vertė
LSMU MA studentė Kristina Norvainytė

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Europos vyresnio amžiaus vyrų tyrimo seksualinių funkcijų klausimynas (EMAS-SFQ) – metodika vyrų lytinei funkcijai įvertinti

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Vyrų seksualinių funkcijų įvertinimas yra svarbi užduotis, kurią bandoma spręsti jau keletą dešimtmečių. Daugiausiai buvo dirbama siekiant diagnozuoti ir gydyti erektilinę disfunkciją [1]. Tačiau vyrų seksualumo problemų yra kur kas daugiau, nei vien tik erekcijos sutrikimai. Daryl B. O'Connor, Giovanni Corona, Gianni Forti ir bendraautoriai 2008 metais sukūrė EMAS – SFQ (*angl*. European Male Ageing Study Sexual Function Questionnaire) klausimyną, kuris buvo validuotas ir panaudotas Europos vyresnio amžiaus vyrų tyrime (EMAS) [2]. Klausimyną užpildė 3112 vyrų iš 8 Europos centrų: Florencijos (Italija), Lioveno (Belgija), Malmės (Švedija), Mančesterio (Jungtinė Karalystė), Santjago de Kompostelos (Ispanija), Lodzės (Lenkija), Šegedo (Vengrija) ir Tartu (Estija). Klausimynas pasirodė itin naudingas, apimantis ne tik erekcijos sutrikimus, bet ir kitus vyrų seksualumo klausimus. EMAS klausimynas originaliai buvo skirtas 40–79 metų amžiaus vyrams, tačiau buvo nutarta klausimyną bandyti naudoti ir jaunesnių vyrų tyrimams. 2010 metais klausimynas buvo išverstas į lietuvių kalbą [3]. Lietuvišką EMAS SFQ klausimyno versiją sudaro 25 klausimai, į kuriuos raštu atsako pats respondentas. Tiriamasis turi būti bent kiek seksualiai aktyvus pastarųjų 4 savaičių laikotarpyje. Klausimai apima keturis svarbius seksualumo domenus: bendro seksualumo, seksualinio distreso, masturbacijos ir seksualumo kaitos vienerių metų laikotarpyje. Vertimas atliktas 2 vertėjų porų, po ko abu vertimo variantai įvertinti nepriklausomų ekspertų. Nustatyta, kad šio klausimyno, kaip psichometrinės tyrimo priemonės, patikimumas yra geras (Cronbach α=0.8) [3]. Išverstas į lietuvių kalbą EMAS SFQ klausimynas jau buvo naudotas tiriant sveikų asmenų ir 1-o tipo cukriniu diabetu sergančiųjų seksualines funkcijas [4,5]. Apie siekį įtraukti šį klausimyną į prieinamų lietuviškų instrumentuočių sąrašą „Biologinės psichiatrijos ir psichofarmakoterapijos" žurnale ir interneto tinklapyje elektroniniu paštu buvo informuoti jo kūrėjai- Daryl B. O'Connor, Frederick C.W. Wu ir David M. Lee ir gautas jų sutikimas tolimesniam šio instrumento naudojimui.

Skalės įverčiai

EMAS- SFQ klausimynas vertinamas, suskirstant atsakymus į keturis domenus: bendro seksualumo, seksualinio distreso, masturbacijos ir seksualumo kaitos.

Domenai:	Sumuojami klausimų atsakymai	Įverčio ribos
Bendras seksualumas:	1,5,6,13,17	0-33
Seksualinis distresas	3,8,11,15,18	0-20
Seksualumo kaita	4,9,12,16,19,22	-12 iki 12
Masturbacija	7	0-7

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EMAS seksualinių funkcijų klausimynas su ekspertų vertinimais

Greta atsakymų variantų yra pateikiamos kiekvieno atsakymo varianto koduojamos skaitinės reikšmės. Šios reikšmės turi būti žinomos tik vertintojui. Pirmieji klausimyno trys klausimai, esantys „A“ skyriuje, yra biografinio pobūdžio. Atsakymai į „A“ skyriaus klausimus neturi jokių koduojamų reikšmių.

A skyrius. Teiraujamasi apie tam tikrus biografijos faktus.

Prašome pažymėti VIENĄ teiginį, kuris geriausiai apibūdina jūsų padėtį PER PASKUTINES 4 SAVAITES:

- Gyvenau su savo žmona ☐
- Gyvenau nesusituokęs su savo partnere ☐
- Turiu sekso partnerę, bet mes kartu negyvenome ☐
- Neturėjau sekso partnerės ☐

Jei per paskutines 4 savaites turėjote sekso partnerę, prašom atsakyti į visus šio rinkinio klausimus.

Jei per paskutines 4 savaites NETURĖJOTE sekso partnerės, prašom praleisti sekančius du klausimus ir pereiti prie B skyriaus

Apskritai vertinant, jūsų partnerės sveikata yra:

- Puiki ☐
- Labai gera ☐
- Gera ☐
- Vidutiniška ☐
- Bloga ☐

Ar buvote patenkintas įprastais (ne seksualiniais) santykiais su savo partnere?

- Labai patenkintas ☐
- Vidutiniškai patenkintas ☐
- Vienodai patenkintas ir nepatenkintas ☐
- Vidutiniškai nepatenkintas ☐
- Labai nepatenkintas ☐

B skyrius

Šiame skyriuje teiraujamasi apie jūsų seksualinį impulsą ar lytinį potraukį

Prašome pažymėti VIENĄ atsakymą, kuris geriausiai jus apibūdina PER PASKUTINES 4 SAVAITES.

1. Kaip dažnai jūs galvojote apie seksą? Apima domėjimąsi seksu, fantazavimą apie seksą, taip pat norą mylėtis.

		Tyrėjo vertinimas
Visiškai negalvojau	☐	0
Kartą per paskutinį mėnesį	☐	1
2-3 kartus per paskutinį mėnesį	☐	2
Kartą per savaitę	☐	3
2-3 kartus per savaitę	☐	4
4-6 kartus per savaitę	☐	5
Kartą per dieną	☐	6
Daugiau negu kartą per dieną	☐	7

2. Kaip jūs įvertintumėte savo lytinį potraukį?

		Tyrėjo vertinimas
Labai silpnas/visiškai nėra	☐	0
Silpnas	☐	1
Vidutinis	☐	2
Stiprus	☐	3
Labai stiprus	☐	4

3. Ar esate susirūpinęs arba susikrimtęs dėl dabartinio savo lytinio potraukio/ aistros lygio?

		Tyrėjo vertinimas
Visiškai nesusirūpinęs arba nesusikrimtęs	☐	0
Truputį susirūpinęs arba susikrimtęs	☐	1
Vidutiniškai susirūpinęs arba susikrimtęs	☐	2
Labai susirūpinęs arba susikrimtęs	☐	3
Ypač susirūpinęs arba susikrimtęs	☐	4

4. Ar jūsų lytinis potraukis/aistra pasikeitė, lyginant su buvusiu prieš vienerius metus?

		Tyrėjo vertinimas
Labai sustiprėjo	☐	+2
Vidutiniškai sustiprėjo	☐	+1
Nei sustiprėjo, nei susilpnėjo	☐	0
Vidutiniškai susilpnėjo	☐	-1
Labai susilpnėjo	☐	-2

C skyrius

Šiame skyriuje teiraujamasi apie seksualinio aktyvumo dažnį.

Jei jūs NETURĖJOTE seksualinės partnerės per paskutines 4 savaites, prašom praleisti 5 ir 6 klausimus ir pereiti prie 7 klausimo. Prašom pažymėti VIENĄ atsakymą, kuris geriausiai jus apibūdina PER PASKUTINES 4 SAVAITES.

5. Kiek kartų jūs siekėte lytinių santykių?

		Tyrėjo vertinimas
Visiškai nesiekiau	☐	0
Kartą per paskutinį mėnesį	☐	1
2-3 kartus per paskutinį mėnesį	☐	2
Kartą per savaitę	☐	3
2-3 kartus per savaitę	☐	4
4-6 kartus per savaitę	☐	5
Kartą per dieną	☐	6
Daugiau negu kartą per dieną	☐	7

6. Nepriklausomai nuo to, kiek kartų Jūs bandėte lytiškai santykiauti, kaip dažnai Jūs bučiavotės, glamonėjotės, glostėtės ir kt.?

		Tyrėjo vertinimas
Nė karto	☐	0
Kartą per paskutinį mėnesį	☐	1
2-3 kartus per paskutinį mėnesį	☐	2
Kartą per savaitę	☐	3
2-3 kartus per savaitę	☐	4
4-6 kartus per savaitę	☐	5
Kartą per dieną	☐	6
Daugiau negu kartą per dieną	☐	7

7. Kaip dažnai masturbavotės?

		Tyrėjo vertinimas
Niekada	☐	0
Kartą per paskutinį mėnesį	☐	1
2-3 kartus per paskutinį mėnesį	☐	2
Kartą per savaitę	☐	3
2-3 kartus per savaitę	☐	4
4-6 kartus per savaitę	☐	5
Kartą per dieną	☐	6
Daugiau negu kartą per dieną	☐	7

8. Ar esate susirūpinęs arba susikrimtęs dėl bendro savo lytinio aktyvumo dažnio (įskaitant lytinius santykius, bučinius ir t.t. bei masturbaciją)?

			Tyrėjo vertinimas
Visiškai nesusirūpinęs arba nesusikrimtęs	☐	Praleiskite 8A klausimą. ir pereikite prie 9 klausimo	0
Truputį susirūpinęs arba susikrimtęs	☐		1
Vidutiniškai susirūpinęs arba susikrimtęs	☐		2
Labai susirūpinęs arba susikrimtęs	☐		3
Ypač susirūpinęs arba susikrimtęs	☐		4

8A Jei **ESATE** susirūpinęs ar susikrimtęs dėl dabartinio jūsų lytinio aktyvumo dažnio, ar manote, kad jis yra:

		Tyrėjo vertinimas
Per dažnas	☐	1
Nepakankamai dažnas	☐	2

9. Ar pasikeitė jūsų bendras lytinio aktyvumo dažnis, palyginus su buvusiu prieš metus?

		Tyrėjo vertinimas
Žymiai padidėjo	☐	+2
Vidutiniškai padidėjo	☐	+1
Nei padidėjo, nei sumažėjo	☐	0
Vidutiniškai sumažėjo	☐	-1
Žymiai sumažėjo	☐	-2

D skyrius

Šiame skyriuje teiraujamasi apie jūsų gebėjimą patirti erekciją. Vyrai dažnai patiria erekcijos problemų. Tai galėtų reikšti, kad ne visada pavyksta pasiekti ir išlaikyti pakankamai standžią erekciją, kad būtų galima sėkmingai atlikti lytinį aktą ar masturbaciją .

Prašome pažymėti VIENĄ teiginį ar atsakymą, kuris geriausiai jus apibūdina PER PASKUTINES 4 SAVAITES.

10. Jūs:

		Tyrėjo vertinimas
Visada galite patirti ir išlaikyti erekciją, kuri būtų pakankama lytiniams santykiams		3
Dažniausiai galite patirti ir išlaikyti erekciją, kuri būtų pakankama lytiniams santykiams		2
Kartais galite patirti ir išlaikyti erekciją, kuri būtų pakankama lytiniams santykiams		1
Niekada negalite patirti ir išlaikyti erekcijos, kuri būtų pakankama lytiniams santykiams		0

11. Ar esate susirūpinęs arba susikrimtęs dėl dabartinio savo gebėjimo patirti erekciją?

		Tyrėjo vertinimas
Visiškai nesusirūpinęs arba nesusikrimtęs		0
Truputį susirūpinęs arba susikrimtęs		1
Vidutiniškai susirūpinęs arba susikrimtęs		2
Labai susirūpinęs arba susikrimtęs		3
Ypač susirūpinęs arba susikrimtęs		4

12. Ar pasikeitė jūsų erekcijos pasiekimo gebėjimas, palyginus su buvusiu prieš metus?

		Tyrėjo vertinimas
Žymiai padidėjo		+2
Vidutiniškai padidėjo		+1
Nei padidėjo, nei sumažėjo		0
Vidutiniškai sumažėjo		-1
Žymiai sumažėjo		-2

E skyrius

Šiame skyriuje teiraujamasi apie jūsų orgazmo arba kulminacijos potyrį, vedantį prie sėklos ejakuliacijos dėl bet kokios seksualinės veiklos (įskaitant lytinį aktą ar masturbaciją).

Prašome pažymėti VIENĄ atsakymą, kuris geriausiai jus apibūdina PER PASKUTINES 4 SAVAITES.

13. Kaip dažnai lytinės stimuliacijos metu jūs patirdavote orgazmą ar kulminaciją?

		Tyrėjo vertinimas
Lytinių santykių/masturbacijos nebuvo		0
Beveik niekada/niekada		1
Kelis kartus (daug mažiau negu pusę visų kartų)		2
Kartais (apie pusę visų kartų)		3
Dažniausiai (žymiai daugiau negu pusę kartų)		4
Beveik visada/visada		5

14. Kaip buvote patenkintas savo orgazmo laiko kontrole? (“Būti nepatenkintu” gali reikšti, kad orgazmui pasiekti reikia per daug laiko arba jis įvyksta per anksti).

			Tyrėjo vertinimas
Ypatingai patenkintas		Praleiskite 14A klausimą ir pereikite tiesiai prie 15 klausimo.	4
Labai patenkintas		Praleiskite 14A klausimą ir pereikite tiesiai prie 15 klausimo.	3
Vidutiniškai patenkintas			2
Mažai patenkintas			1
Visiškai nepatenkintas			0

14A Jei nesate ypatingai ar labai patenkintas, tai ar Jūsų orgazmas įvyksta

Per anksti	
Per vėlai	

15. Ar esate susirūpinęs arba susikrimtęs dėl dabartinio savo orgazmo patyrimo?

		Tyrėjo vertinimas
Visiškai nesusirūpinęs arba nesusikrimtęs		0
Truputį susirūpinęs arba susikrimtęs		1
Vidutiniškai susirūpinęs arba susikrimtęs		2
Labai susirūpinęs arba susikrimtęs		3
Ypač susirūpinęs arba susikrimtęs		4

16. Ar pasikeitė Jūsų pasitenkinimas, susijęs su orgazmais, lyginant su buvusiu prieš metus?

		Tyrėjo vertinimas
Žymiai padidėjo		+2
Vidutiniškai padidėjo		+1
Nei padidėjo, nei sumažėjo		0
Vidutiniškai sumažėjo		-1
Žymiai sumažėjo		-2

F skyrius

Šiame skyriuje teiraujamasi apie jūsų rytines erekcijas. Vyrai gali nubusti patirdami erekciją, tačiau tai gali kasdien keistis.

Prašome pažymėti VIENĄ atsakymą, kuris geriausiai jus apibūdina PER PASKUTINES 4 SAVAITES.

17. Ar dažnai jūs atsibudote su pilna erekcija

		Tyrėjo vertinimas
Niekada		0
Kartą per paskutinį mėnesį		1
2-3 kartus per paskutinį mėnesį		2
Kartą per savaitę		3
2-3 kartus per savaitę		4
4-6 kartus per savaitę		5
Kartą per dieną		6
Daugiau negu kartą per dieną		7

18. Ar jūs susirūpinęs ar susikrimtęs dėl savo rytinių erekcijų dažnio?

		Tyrėjo vertinimas
Visiškai nesusirūpinęs arba nesusikrimtęs		0
Truputį susirūpinęs arba susikrimtęs		1
Vidutiniškai susirūpinęs arba susikrimtęs		2
Labai susirūpinęs arba susikrimtęs		3
Ypač susirūpinęs arba susikrimtęs		4

19. Ar pasikeitė jūsų rytinių erekcijų dažnumas palyginus su buvusiu prieš metus?

		Tyrėjo vertinimas
Žymiai padažnėjo		+2
Vidutiniškai padažnėjo		+1
Nei padažnėjo, nei suretėjo		0
Vidutiniškai suretėjo		-1
Žymiai suretėjo		-2

G skyrius

Atsižvelgiant į atsakymus, kuriuos pateikėte anksčiau, norėtume sužinoti, ką jūs apskritai manote apie savo lytinio gyvenimo kokybę?

Prašome pažymėti VIENĄ atsakymą, kuris geriausiai jus apibūdina PER PASKUTINES 4 SAVAITES.

20. Ar buvote bendrai patenkintas savo lytiniu gyvenimu?

		Tyrėjo vertinimas
Labai patenkintas		4
Vidutiniškai patenkintas		3
Vienodai patenkintas ir nepatenkintas		2
Vidutiniškai nepatenkintas		1
Labai nepatenkintas		0

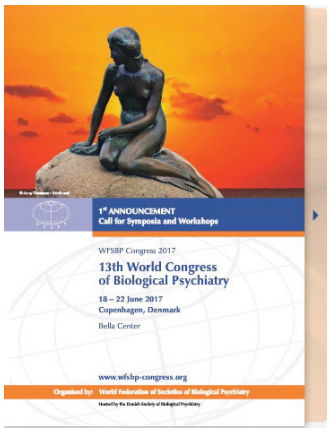
21. Kaip bendrai esate susirūpinęs arba susikrimtęs dėl savo seksualinio gyvenimo?

		Tyrėjo vertinimas
Visiškai nesusirūpinęs ar nesusikrimtęs		0
Šiek tiek susirūpinęs ar susikrimtęs		1
Vienodai susirūpinęs/nesusirūpinęs ar susikrimtęs/nesusikrimtęs		2
Vidutiniškai susirūpinęs ar susikrimtęs		3
Labai susirūpinęs ar susikrimtęs		4

22. Kaip bendrai pasikeitė Jūsų pasitenkinimas seksualiniu gyvenimu lyginant su buvusiu prieš metus?

		Tyrėjo vertinimas
Žymiai pagerėjo		+2
Vidutiniškai pagerėjo		+1
Nei pagerėjo, nei pablogėjo		0
Vidutiniškai pablogėjo		-1
Žymiai pablogėjo		-2

PASAULINĖS BIOLOGINĖS PSICHIATRIJOS DRAUGIJŲ FEDERACIJOS (WFSBP) KONGRESAI:



2017 m. birželio 18–22 d. XIII-asis Pasaulinis biologinės psichiatrijos kongresas – Kopenhaga, Danija

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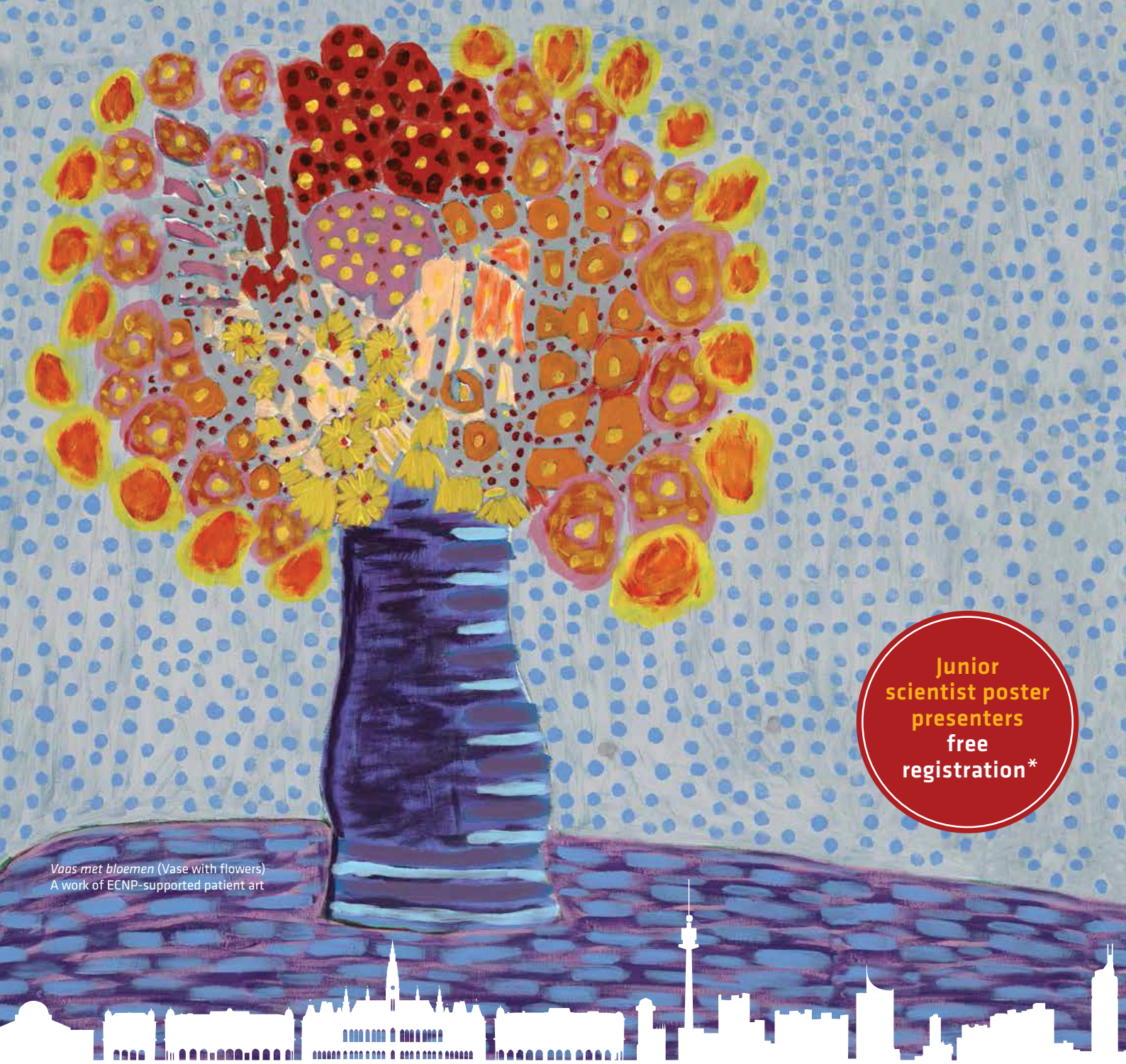

Vaas met bloemen (Vase with flowers)
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