

Hamilton Depression Scale (HDS) as depression and hypomania's physical treatment factor

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CLINICAL WARD OF INTERNAL DISEASES, ANGIOLOGY AND PHYSICAL MEDICINE OF THE CHAIR OF INTERNAL DISEASES AND THE CENTRE OF DIAGNOSTICS AND LASER THERAPY IN BYTOM, POLAND

SUMMARY

Background. Women get sick about three times more often than men. It is assumed that, women are more prone to depression disorders, but none of the theories explains what the reasons are. Depression and hypomania are periodic disorders connected with season of the year, affected by mood depression or mood rise, named seasonal pathology. The aim of the work was analysis and to present methods and resources of use of physical treatment in depression and seasonal hypomania treatment.

Material and methods. The study involved three patients, aged 35-55 years old. Two of them were diagnosed with seasonal depression, and one of them with diagnosed seasonal depression and hypomania, all with a referral to a psychiatrist. Patients were subjected to measurement of pulse pressure, BP, flexibility examination and Hamilton Depression Scale (HDS), before and after physical treatment. There was used 17 points HD Scale, where 0-4 points is the most popular scale of depression disorders, 30-52 points in this measurement prove really deep depression.

Results. In the initial studies, patients received high notes 20-29 HDS points. That showed high depression. After use of physical treatment there was observed pulse and BP normalization. Two of the patients gained 10-12 points in HDS scale, which is characterized with low depression, one with diagnosed depression and hypomania. One of the patients gained under 8 points, pointing depression release.

Conclusions. The usage of physical treatment in the fight against depression and seasonal hypomania allowed to symptom release at two patients. For one them, that allowed to alleviate symptoms to mild depression.

KEY WORDS: depression, hypomania, physical treatment

STRESZCZENIE

Skala Depresji Hamiltona (HDS) jako wskaźnik leczenia fizykalnego depresji i hipomanii

Wstęp. Kobiety chorują około trzy razy częściej niż mężczyźni. Zakłada się, że kobiety są bardziej podatne na zaburzenia depresyjne, ale żadna teoria nie wyjaśnia, jakie są tego powody. Depresja i hipomania to okresowe związane z porą roku zaburzenia dotyczące obniżenia lub w zwwyżki nastroju, zwane patologią sezonową. Celem pracy była analiza i pokazanie środków i metod z szeroko pojętego leczenia fizykalnego w leczeniu depresji i hipomanii sezonowej.

Material i metody. Badaniu poddano trzy pacjentki w wieku 35-55 lat dwie z rozpoznaną depresją sezonową i jedną z depresją i hipomanią sezonową, wszystkie ze skierowaniem do lekarza psychiatry. Pacjentki poddano pomiarowi tętna i ciśnienia RR, badaniu gibkości i Depression Scale (HDS) Skala Depresji Hamiltona przed i po leczeniu zabiegami fizykalnymi. Posłużono się 17 punktową HDS w ocenie od 0-4 punktów jako najczęściej stosowaną skalą zaburzeń depresyjnych, gdzie uzyskany wynik 30-52 punkty świadczy o bardzo ciężkiej depresji.

Wyniki. Pacjentki w badaniach początkowych uzyskały wysokie notowania 20-29 punktów w HDS, wskazujące na ciężką depresję. Po leczeniu zabiegami fizykalnymi u pacjentek zaobserwowano normalizację tętna i ciśnienia RR. Dwie pacjentki w skali HDS uzyskały 10-12 punktów charakterystycznych dla łagodnej depresji w tym pacjentka z początkowo rozpoznaną depresją i hipomanią, a jedna pacjentka uzyskała poniżej 8 punktów świadczących o ustąpieniu depresji.

Wnioski. Zastosowanie leczenia fizykalnego w walce z depresją i hipomanią sezonową pozwoliło na ustąpienie objawów u dwóch pacjentek a jednej na złagodzenie dolegliwości do łagodnej depresji.

SŁOWA KLUCZOWE: depresja, hipomania, leczenie fizykalne

Background

Depression is a state of depressed mood, decreased activity, and slow thinking. Sleep and appetite disorders are typical. At some patients can appear cancellation and suicidal thoughts. Hypomania is a mild elevation of mood or irritability lasting several days. We can observe clear impediment of functioning, but not in significant or relevant level. Cyclical repetition of mood disorders is attributed to autumn depression time, during spring time-hypomania. Both of the diagnosis should be differentiate from mania, which is characterized by a significant increase in mood or high irritation, completely disrupting psychosocial functioning [1]. More often we meet with the seasonal mood change, which develops from disturbed mood to depression or hypomania on psychiatric undertow. We face with the problem of dealing with everyday life. No proper psychosocial functioning is reflected in the reduced quality of life. The World Health

Organization (WHO) defines quality of life as "a comprehensive evaluation by the unit, her physical health state, emotional state, independence in life and level of independence from the environment, as well as the relationship with the environment and attitude to environment." As it follows from the definition of relationship between man and the environment and the attitude to environment, builds relationship between man, attitude and consciousness of his quality of life. This relationship is shattered even during seasonal depression [2]. Hamilton Depression Scale (HDS) allows to assess depression symptoms, such as: mood depression, anxiety, daily routine disorders, sleeping disorders, psychomotor slack, libido decrease, lower self-esteem, guiltiness, hypochondria, weight loss, psychical and somatic anxiety and co-existing somatic ailments [3]. HDS served as, an indicator of progress of depression and hypomania physical treatment before women psychiatric treatment.

Material and methods

The study involved three patients healed in Specialist Neurological Clinic, directed to Specialist Psychiatric Clinic with the earlier referral on complex physical treatment. Women aged 35-55, two of them with diagnosed seasonal depression and one, with seasonal hypomania. Patients agreed to attend on physical treatment before psychical treatment. Pharmacologically they were treated with permanent hypertension medicine and two of them, I and II woman ingested herbal remedy for states of depressed mood, depressive type, like mood swings typical for the weather change, states of nervous tensions and anxiety or neurovegetative disorders of menopause time. III woman did not ingest any antydepression medicine. Patients were subjected to measurement of pulse pressure, BP, flexibility examination and Hamilton Depression Scale (HDS) ,before and after physical treatment. Pulse measurement was made on forearm radial artery. Blood pressure was measured by sphygmomanometer gauge on the patients' left shoulder. The so-called centimeter, flexibility test was made. The examination was conducted in simple seat. Feet ordered to deploy with 25 centimeters break. Centimeter tape positioned, so that 35 cm value was in an ankle area and tape beginning directed to knees. Patients performed torse bend with joined hands as far ahead. There were made three attempts reaching hands far as possible, the longest distance was written. At patients was used magnetic field from magneto-symulation, there was used Viofor JPS driver as well, expecting increased electrolyte exchange, improving fluids flow and obtaining analgesic effect. There was used irradiation with Led light from red light range around spine area , using the reparitive-regenera-

tive action. To improve mood, there was used phototherapy of light therapy and colour therapy with Q.Light lamp, changing psychoneuroimmunological system. Exposures were used alternately for two weeks in the chair position at a distance of 40 cm from the light source, without looking directly at the light intensity of 7500-10 000 lux at 30-60 minutes. Vibroacoustics was used for local massage and to enforce analgesic effects. There was used classic massage and a massage with hot basalt stones with volcanic origin of high index of thermal storage with pine oil scent aromatherapy. To improve the proper lymph flow there was used kinezotaping on painful and low stretched places. To 20 minutes exercises with thera band, there was used a music as a form of music therapy, abreactive-imaginative and activating emotions by using movie music like for example Ludovico Einaudi-Una Mattina. In the end, there was used exercises with yoga elements like asans:power, mountain, half-moon position. To improve circulation, hot water 37 C and cold water 20 C legs watering. Ater two weeks of therapy with break for Saturday and Sunday, daily using the set of five treatments according to guidelines and art of physical treatment, combining treatments of magnetic field, phototherapy, massage, exercises and relax, the patients were examined once more.

Results

All of the patients sustained ten days of treatments , eercises and relaxation. During eleventh day patients were examined according to pulse pressure, BP, flexibility and Hamilton Depression Scale test . The results are presented in Tab. 1 and 2.

Tab. 1. Characteristics of women before and after treatment

	AGE	BMI	RESTING HEART RATE BEFORE	RESTING HEART RATE AFTER	BP BEFORE	BP AFTER	FLEXIBILITY BEFORE cm	FLEXIBILITY AFTER cm	Diagnosis
I W	35	25	104	80	149/90	120/80	< 22 low	22-27,5 medium	depression hypomania
II W	40	27	96	70	160/90	130/80	< 22 low	27,5-40 medium	depression
III W	55	27	100	74	165/90	135/80	< 17 low	25,5-37,5 well	depression

Tab. 2. Characteristics of women in HDS scale before and after treatment

	HDS BEFORE TREATMENT	HDS AFTER TREATMENT
I W	29 P. DEEP DEPRESSION	8-12 P. LOW DEPRESSION
II W	28 P. DEEP DEPRESSION	8-12 P. LOW DEPRESSION
III W	28 P. DEEP DEPRESSION	< 8 P. WITHOUT DEPRESSION DISORDERS

Discussion

Factors which influence on increased morbidity of depression and hypomania is latitude, which determines the sunlight. The genetic factor which increases mental toughness, an attitude to low temperatures and tolerance to lack of the daylight. Gender, women get sick more often, heredity, and the incidence in the family is a epidemiological factor[4]. Light has a huge influence on depression or seasonal hypomania incidence. The light stops the melatonin production. At the time of decreased sunlight emission, there is automatically higher level of melatonin[5]. It is why we reach for the light therapy the most often and in the easiest way, with high effectiveness. Phototherapy under the name of light therapy, where we use white light and colour therapy with the usage of color light, quickly reacts on the way of retina, brain, conarium, pituitary, emitting hormones which improve our mood and prevent from depression [6]. Biological effect which, is made in tissues under influence of low-energetic light we use by ledotherapy. Her action effects depend on used power, and the effects are the results of phototherapy not warm influence [7]. Light is necessary to human life, it does not only improve our mood, but it is also a basic element of every biological ecosystem. Everyone knows the influence of light, during light and sunny days we feel better, than during dark, cloudy days. Opposite to natural sunlight, which occurrence and intensivity is dependable from the part of the day and year, modern light therapy can be used on every part of the day and everywhere. Light therapy is a perfect full-filment of traditional treating method. Improvement of the general condition, in some cases, we can observe after short time- without drugs usage or side effects [8]. Therapy with visible light (385-780nm) without UV rays and infrared is fully safe. Colours are huge usable tools in treating many diseases, from small ailments such as: headaches, apathy to chronic disorders, where they causes balance restorement, energy animation in whole body. Color therapy activates local and systemic microcirculation, improves permeability of cell membranes, increases cell metabolism, stimulates the lymphatic activity, regulates hormonal system. Magnetic field therapy of low frequency, fullfils the treatment of another methods, as well as, is a basic prevention of civilization diseases and rehabilitation in many parts of clinical medicine [9,10]. At patients was used magnetic field of magneto-stimulation which affected on cell and tissue level. There is stimulated electrolyte exchange between cell and its area, there is higher mitotic activity, antimutagenic activity, enzymatic activity, there is also bigger ATP and DNA synthesis. Achievement from recent years are studies, that prove that combined therapy like magnetoledotherapy gives measurable therapeutic effects [11]. At the same time, usage of both types of electromagnetic radiation can occur in synergistic action, really beneficial in cases of depressed mood treat-

ment. Body oxygenate and stimulation of central nervous system (CNS), these are benefits from magnetoledotherapy. Vibroacoustic therapy it is a microvibrates usage of amplitude and frequency of vibration, approximately similar to those produced by a living organism, by movement of muscles fibers, caused by physiological muscular tone. The source of vibrates of vibroacoustic therapy device are microvibrates formed on the elastic applicators membranes stimulated by the small electromagnet. The frequency of shakes generated by the device change according to programmed applicator to avoid the effect of tissue accustom to stimulus. Accompanied to mechanical effect of mikro vibrations are acoustic sound vibrations coupled with applicators microvibrates. To vibroacoustic effects are attributed the decogenstans actions and improving the local microcirculation and that gives the relaxing effect. Hot stone massage combines the effects of both thermotherapy, drainage, acupressure, aromatherapy and classic massae as well. The main base of broad influence are thermoreceptors which are located in patient's skin. As a result of reflex action occurs the temperature raise of massage areas and secondary vasodilation. At the same time, this reaction influences on increase of the capacity of the vascular. The proper mood, usage of etherical oils and proper music, influence calmly on patient, stopping the action of limbic system, which decreases the stress. Watering is an hydrotherapeutic action, where we use the influence of temperature factor on the skin in the character of hot then cold water with low pressure. Glazing legs start from external side of foot in the ankle area. Then we water internal calf area toward to knee and to internal part of crus till the area of internal ankle. In the similar way we water the front and the back part of crus. We gain circulation stimulation by draining veins, which gives relax and reduce the legs severing. Flexibility is very important element of whole organism efficiency. International Fitness Association (IFA) recommends easy test so-called: centimeter test[12]. This test not measure the flexibility of whole body, but legs and backs. But it is consider as a measurable indicator of whole flexibility. The result is interpreted according to sex, age and four degree scale. Condition to make this movement exercise is: the proper state of muscle tension, the proper range of movement in each articulation and in whole biokinematic net. The lack of movement is caused by akinetic lifestyle, and is attributed to depression state, which has an impact on worse patient condition. It is why flexibility test is a good index of treatment progress. We can underline two types of flexibility: comprehensive, which is useful in everyday life and a special flexibility which is shaped with determined psychical treatment. Results of our studies confirmed the right of our thesis, usage physical factors to healing depression and hypomania. Movement exercises, which were conducted by our patients allowed on oxygenation, flexibility of motion activity improvement, distraction from your mental state

let to pulse, pressure, flexibility, and mental condition normalization.

Conclusions

The use of physical treatment in the fight against depression and seasonal hypomania allowed on symptoms relief at two patients, and for one patient allowed on alleviate symptoms to mild depression on three healing patients. This method requires further observation and studies on a larger number of patients.

References

1. Alasdair DC. Psychiatria [Psychiatry]. Wyd. II. Wrocław: Urban & Partner; 2005: 14-15 (in Polish).
2. Tobiasz-Adamczyk B. Wybrane elementy zdrowia i choroby [Selected elements of health and illness]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego; 2000: 233-251 (in Polish).
3. Bowling A. Measuring disease. A review of disease-specific quality of life measurement scales. Buckingham: Open University Press; 1995.
4. Święcicki Ł. Depresja – zwykła choroba? [Depression – a common illness?] Wrocław: Urban & Partner; 2010. ISBN 978-83-7609-276-8 (in Polish).
5. Święcicki Ł. Depresja jednak istnieje! [Depression does exist!] Medycyna po Dyplomie – Zeszyt Edukacyjny 2011; 4: 39 (in Polish).
6. Timonen M, et al. Transcranial Brain- Targeted Bright Light Treatment via Ear Canals in Seasonal Affective Disorder (SAD). 2011.11.9-10; Poster presentation at the 11 th IFMAD Conference.
7. Mucha R, Malec P, Pasek J, Sieroń A. Światło spolaryzowane w leczeniu zespołów bólowych lędźwiowego odcinka kręgosłupa – badania własne [Polarized light in the treatment of low back pain – own research]. Chir. Kolana Artroskopia Traumatol. Sport. 2008; 2: 27-32 (in Polish).
8. Pasek J, Cieślak G, Pasek T, Sieroń A. Leczenie światłem spolaryzowanym nowe możliwości światłolecznictwa [Treatment using polarized light; new opportunities for phototherapy]. Balneol. Pol. 2008; 2: 93-98 (in Polish).
9. Szajkowski S, Suszyński K, Sieroń A. Nowatorska metoda aplikacji zmiennego pola magnetycznego [An innovative approach involving application of changeable magnetic field]. II Kongres Polskiego Towarzystwa Medycyny Fotodynamicznej i Laserowej wraz z XXV Sympozjum Fizjoterapeutów Med. & Life w ramach Śląskich Medycznych Spotkań Uzdrawiskowych. Ustroń: Program i Abstrakty; 2008: 76 (in Polish).
10. Cieślak G, Sieroń A. Magnetostymulacja – nowa forma nefarmakologicznego leczenia depresji lekoopornej [Magnetic stimulation – a new form of non-pharmacological treatment of medication-resistant depression]. 2013.09.5-8; Świeradów Zdrój: XXIV Kongres Balneologiczny; Acta Balneol. 2013; 3: 194 (in Polish).
11. Sieroń A. Współczesna medycyna fizykalna [Contemporary physical medicine]. 2013.09. 5-8; Świeradów Zdrój: XXIV Kongres Balneologiczny; Acta Balneol. 2013; 3: 198 (in Polish).
12. <http://www.mediweb.pl/interactive/test12.php>.

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