REHABILITATION OF PATIENTS WITH CHRONIC ALCOHOL INTAKE – WITH A CASE STUDY

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Abstract: Alcohol consumption is directly linked to a number of lifetime antecedents - genetic predisposition, psychological factors, social environment, stress, traumatic events and early onset of use. The abuse of chemical substances has adverse effects on the human organism and in most cases lead to the development of dependence and even death. The preconditions leading to the development of intemperate or regular consumption may be based on genetic or epigenetic grounds. Strategies have been developed to cope with alcohol consumption. A strategy has been established by the European Commission to combat excessive alcohol consumption through the creation of local policies related to coping processes and addiction prevention - through direct and individual counselling, as well as awareness raising at national level through mass media platforms (EU Alcohol Strategy, last updated on 13.01.2016). Purpose: The purpose of this article is to highlight the positive effects of traditional and alternative approaches to rehabilitation through the presentation of a case study. Objectives: A framework of applied rehabilitation approaches including individual therapeutic approach is outlined. The review demonstrates the possible methods of application. The presented clinical case is of a 50 year old patient with a long history of alcohol consumption, complaints related to lumbar pain and altered neurosensation in the upper and lower extremities. The kinesitherapeutic agents were selected based on the subjective complaints according to the patient's long-term goal. The program includes means such as: traditional massage, combined with acupressure points on the lower and upper limbs, auricular acupressure points and active exercises – physical activity to be performed in a home environment. Methodology: Course duration – 3 months (10 weeks - 24 treatments), 2-3 sessions per week. Results: The combination of Chinese medicine and classical kinesitherapy tools proved to be effective for the follow-up period. At the end of the therapeutic period, the patient reported a significant improvement in subjective complaints as well as a reduction in daily alcohol intake. Conclusion: In this isolated case, positive changes in behaviour and daily habits were observed that cannot be followed up in the future. Recommendations: The combination of multiple methods shifts the focus and no judgement can be made as to which of the remedies used contributed to the outcome found. The application of a similar approach, in a larger group would have validated the findings.
Keywords: alcohol, addiction, rehabilitation, case study.

1. INTRODUCTION

Annually, the number of persons consuming alcohol increases, deviating in different age ranges. Unfavourable statistics point to an increase in the dependence among the young population, leading to adverse consequences in the future, as well as an increase in conflicts in the social environment. National and social campaigns are raising the issue among the public. The health profile of the population in the Republic of Bulgaria indicates the number of persons affected immediately after alcohol consumption or the polymorbidity provoked by adaptation to ethanol substrates (OECD/European Observatory on Health Systems and Policies (2023), Bulgaria: Country Health Profile 2023).

Meaning of alcoholism and excessive alcohol consumption: the terms "alcohol abuse" and "alcoholism" are put as a definition of persons or a group of persons using ethanol beverages in excessive quantities, often creating conditions for clash with the authorities, society or their family environment (Saxe, L., 1983).

The preconditions for alcohol dependence and excessive consumption are many but it can be a consequence of established social habits. Giannone, F., et al. (2024) examine the effects of alcohol on humans and animals, confirming that “occasional” alcohol use, initially a habit, could become a dependence over time. In addition to the adverse social habits, alcohol consumption leads to a number of changes in the body that can have long-term and unfavorable effects on the body and mind. Lakkineni, M. A. K. (2024) reported that a large percentage of the individuals they studied reported that, they had observed or witnessed patterns of alcohol use in the family environment. Other studies have inferred evidence of a genetic antecedent - a combination of genes (Kimura, M., & Higuchi, S., 2011; Edenberg, H. J., & Foroud, T., 2013; Zhou, H., & Gelernter, J., 2024), various epigenetic

antecedents (Zhou, H., & Gelernter, J. (2024), predisposing to development of alcoholism, with intelligence level being of significant importance (Sjölund, S., Hemmingsson, T., & Allebeck, P. (2015). According to Toteva, S. et al. (2015), people who consume alcohol can be divided into several groups - depending on certain criteria. A model classifying individuals into five different categories depending on the use is presented: abstainer, problem-free use, risky use, abuse, dependence. A view is put forward that risky consumption is that which, in addition to excessive amounts, has a frequent repetition. In the last and most severe category of 'dependence' the capacity of voluntary refusal is reduced.

General effects on the body in case of prolonged intake: Changes that may affect patients in the future are also the most common reasons to seek help from specialists. In a large percentage of the cases it leads to: change in the function of the cardiovascular system, peripheral nervous system, cerebrovascular incidents, liver and kidney diseases, cognitive changes - memory, behavior; change in the overall metabolism, etc. (Karunarathna, I., De Alvis, et al., 2024).

According to the authors DANĚK, A., et al., (2024), the consequences of alcohol use can also be expressed at a personal level as: difficulty in establishing social contacts and maintaining them for a long period of time, low self-esteem and changes in the emotional expression, the main recommendation being to pay close attention to family dynamics. In the course of development, alcoholism can reach high levels of anxiety and depression, and it can also express itself in suicidal thoughts (Sharma, A., & Chawla, P., 2024). The majority of patients suffer from one or more psychological conditions and illnesses, a cause or consequence of alcohol consumption (Saini, A., & Chawla, P., 2024). Treatment requires a multidimensional insight and approach encompassing all areas of life (Kissin, B. (Ed.)., 2012), including cognitive behavioral therapy (Dilafruz, X., & Feruza, G., 2024).

Clinical rehabilitation approach combined with alternative methods: the treatment and therapeutic approach for persons with alcohol dependence requires a multidisciplinary approach. The possibility of a combination of different therapeutic means increases the success rates, despite the inability to validate results in the long term. Various therapeutic approaches have been proposed in the field of rehabilitation: physical activity (Ussher, M., et al., 2000), acupuncture and/or acupressure in specific areas and at specific combination points (Chen, P., Li, J., Han, X., et al., 2018), massage (Adcock, C. L., 1988); Chernchujit, N., & Kalayasiri, R., 2014), application of an appropriate diet (Hauser, M. B., & Iber, F. L., 1989), working with a psychologist/psychotherapist (Miller, W. R., & Brown, S. A., 2009; RANI, R. A. N., 2021), etc.

The combination of different methods and approaches proves to have the best results in the short term. The main disadvantage is the treatment period. In order to retain the positive effect, prolonged treatment and lifelong control by the patient is necessary.

2. MATERIALS AND METHODS

Clinical case: male, 50 years old: clinically healthy - with unproven diseases, with manifestations of peripheral neuropathy (undiagnosed, subjective complaint) and chronic consumption of alcohol and derivative drinks (for about 20 years). Well built, no change in the normal weight. Good general condition, good psycho-emotional condition, socially engaged and active, physically active. Preserved symmetries in both halves of the body, no spinal curvature or compensation along the kinetic chains.

Concomitant condition - smoking (up to 20 cigarettes per day) and alcohol consumption - on average 500 ml (mainly hard alcohol, including beer) per day.

He reports no family history.

Main complaints: experiences severe discomfort in the lower back area (VAS – visual analog scale (Crichton, N., 2001) for pain - 6, varying depending on the physical effort performed during daily activities), and loss of sensation in the lower limbs and in the palm area of the hands - mostly paresthesias in the fingers (numbness and tingling, according to subjective data). No impairment in gait and balance, he is able to perform complex tasks, overcome obstacles, climb stairs and walk at different paces (with and without the visual analyzer).

Duration and dosage: Course duration - 3 months (10 weeks). In the first two weeks, 6 treatments were carried out, the rest are distributed over the remaining time - two or three times a week, a total of 24 treatments.

Remedies: classical full-body massage and stimulation of ST36 (in the knee area) and HT7 (in the wrist area) (Chen, P., Li, J., Han, X., et al. 2018) for the first two weeks, acupressure in the ear and body area (throughout the period) (Berman, A. H., 2006), as well as physical activity (exercises for the torso and lower limbs assigned for home work).

Auriculotherapy: the initial application is symptomatic. Points are applied to relieve temporary ailments causing severe discomfort - pain and numbness along the legs, as well as temporary paresthesias in the upper limbs. A basic therapeutic regimen for the treatment and detoxification of addictions is made up of the points Lung, Liver, Kidney, Sympathicus and Shen Men (Berman, A. H., 2006).

Methodological guidelines: the methodology is built over time based on the patient's subjective complaints. In the beginning, an approach was implemented treating the main complaints in the limbs and lumbar region; subsequently, a combination was included to help quit the alcohol consumption.
Methodology of the applied program: 1st and 2nd week: classical massage of the whole body with emphasis on the lower back and lower limbs, with an impact on ST36 (knee area) and HT7 (wrist area) - 40 minutes; during the relaxation period (after the end of the first part of the procedure), acupressure is applied in the area of the auricles (areas - spine and lower limbs, n. ischiadicus point, muscle relaxation point, liver, kidney and bladder). Active exercises for lower limbs and lumbar section, coordination exercises for upper limbs.
Week 3-10: Combination of points: Lung, Liver, Kidney, Sympathicus, Shen Men; massage in the spine and lower limbs. Active exercises for home work.

3. RESULTS

During the treatment period, the patient and family reported a reduction in daily alcohol consumption to 200-300 ml per day or none at all.
According to the patient, after the first two weeks of therapy, the feeling of numbness or loss of sensation in the limb area was significantly reduced, to absent in some days. An improvement in the general psycho-emotional condition was reported, as well as significant increase in energy that was preserved throughout the day.

4. DISCUSSION

The therapy period was not sufficient for complete cessation of alcohol use, but was sufficiently effective with regard to the subjective complaints - pain in the lumbar section of the VAS -3 (at the end of the therapeutic period, unchanged by strenuous physical work in everyday life).
Patient follow-up after 1 year and 7 months: has completely stopped alcohol consumption after a severe inflammatory lung disease (pneumonia).

5. CONCLUSIONS

Practice confirms the effectiveness of the applied methods, combining traditional and alternative methods of treatment. Acupuncture/acupressure is widely used in the treatment of various addictions. The demonstrated case confirms the success of Chinese medicine in the treatment of alcohol dependence in the initial, later and chronic periods of the development of the condition. The quoted literature sources provide evidence of the impact of Chinese medicine as a relapse prevention tool.

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