

Alcohol Consumption – Implications in Orthopedic Trauma

Andrei Bradeanu⁴, Razvan Tudor³, Paul Dan Sîrbu², Anamaria Ciubară⁵, Loredana Pascu⁴, Alexandru Bogdan Ciubară¹

¹Department of Morphological and Functional Sciences, Dunarea de Jos University, Galati, Romania

²Department of Orthopaedics and Traumatology, UMF Iasi, Romania

³Department of Orthopaedics and Traumatology, County Emergency Hospital, Vaslui, Romania

⁴Department of Orthopaedics and Traumatology, “Sf. Ap. Andrei” Hospital, Galați, România

⁵Department of Psychiatry, Dunarea de Jos University, Galati, Romania

Email address:

anamburlea@yahoo.com (A. Ciubară)

Abstract:

In mental health field is established that alcohol consumption can exacerbate an underlying mental health disorder. Among people with severe mental health are common alcohol problems. Alcohol depress the central nervous system and this might produce moods fluctuation and worsen the depression and anxiety. At heavy and/or chronic drinkers were reported several symptoms involving cognitive ability including diminished brain size, memory loss, loss of attention span, loss of visuospatial abilities, inability to think abstractly, Wernicke-Korsakoff syndrome. Alcohol can temporarily alleviate feelings of depression and anxiety, so people tend to use it as a form of ‘self medication’ in order to cheer themselves up or as a sleep help. But also, alcohol can disturb the body’s ability to rest, so it can lead to reduced energy levels. The key to mental health patients who regularly consume alcohol is the toxic cyclical process created. At first, one drink to relieve depression, but alcohol deplete serotonin levels, so the patient feels more depressed and thus necessitating more alcohol to ‘treat’ his depression. Sometimes it can also reveal or intensify underlying feelings, evoke past memories of trauma or any other event associated with painful feelings. Moreover, alcohol has pain-reducing properties (sustained also in a systematic review published in December 2016 issue of “The Journal of Pain”) by decreasing the activity of nerves within the brain. Furthermore, this chronic ‘self medication’ with alcohol has a wider action on the body.

1. Growing Bone - Epidemiological studies shows that chronic alcohol consumption at young age affect the bone’s health; it has multiple effects on osteoblasts (forming cells), slows down the bone turnover and can increase the risk of osteoporosis.
2. Adult Bone - There were studies on animals and researches in human adults made to prove the relationship between alcohol consumption and bones’ health. The results show that the alcohol consumption is less damaging for adults than young people, but research has shown that seventh decade women or older who consumed an average of more than 3 ounces of alcohol/day (equivalent of six drinks) had greater bone loss than women who had minimal alcohol intake. (Hannan et al. 2000) So postmenopausal chronic heavy drink women have an increased risk of osteoporosis and bone fractures. Researches suggest that alcohol consumption and poor nutrition and/or tobacco use lowers even more bones’ mineralization and increase the likelihood of bone fractures. Dr. Iliriana Bisha Tagani presented for SteadyHealth the relationship between alcohol consumption and joint pain. Alcohol dehydrates the organism because of its diuretic properties. Ligaments are structures rich in water and need water periodically to remain soft and spongy. So high alcohol consumption leads to excess removal of water from the body. The ligaments are one of the first to get affected by dehydration so they lose from their elasticity and any movement of the joints can lead to unbearable pain and arthritis (moreover, alcohol is considered an arthritis „trigger food”)
3. Immunity - Chronic heavy consumption of alcohol can suppress the immune system after a period of time. It can also cause neuropathy, making someone feel a pins and needles sensation in their extremities, a compounded effect with those who suffer from arthritis.

In conclusion, patients with mental health disorder present an increase tendency of alcohol abuse, which predominant leads to articular and bones disfunctions. These patients also presents a high tolerance pain due to analgesic and neuropathic effects which frequently masks the symptoms of affections like arthritis.

Keywords

Orthopaedics, Psychiatric Disorder and Trauma, Alcohol Consumption, Mental Health