Neurological complications of bariatric surgery

Bilgehan Atilgan ACAR 1, Atahan ACAR 2

1 Department of Neurology, Sakarya University Faculty of Medicine, Sakarya / TURKEY
2 Department of Surgery, IKCU Ataturk Training and Research Hospital, Izmir / TURKEY

Obesity is a worldwide problem with an increasing prevalence. Bariatric surgery (weight loss surgery) includes a variety of procedures performed on people who have obesity. The number of bariatric surgeries has been rising in recent years because it is commonly considered to be the most effective treatment for obesity in terms of maintenance of a substantial weight loss and resolution of obesity-related comorbidities. There are different types of bariatric surgical procedures. The overall aim of bariatric surgery is to reduce intake or absorption of macronutrients including fats, carbohydrates and proteins which decrease caloric intake. It is also known that this increases the risk of nutritional deficiencies. The absorption of micronutrients including essential minerals and vitamins may be reduced. Most common nutritional deficiencies are vitamin B12, vitamin B9 and vitamin B1. Following them other deficiencies are vitamin D, niacin, pyridoxine, vitamin E and copper. Clinical neurological presentations following bariatric surgery may affect both central and peripheral nervous system and death is a possible. They can be classified by time to presentation. Wernicke’s encephalopathies, Korsakoff syndrome, acute polyradiculoneuropathies, optic neuropathies, myelopathies, peripheral neuropathies and myopathies are the most identified clinical presentations. Clinicians need to recognize and learn to manage these complications and a multidisciplinary approach of nutritional management including patient education is highly recommended.

Biography

Bilgehan Atilgan has graduated from Medical School of Ankara University in 2004. He has completed Neurology Residency at Ministry of Health, Diskapi Yildirim Beyazit Education and Research Hospital, Turkey. He has worked as a Neurologist and Instructor at Sakarya University and became an Assistant Professor in 2013.

bilgehanacar@hotmail.com