

AB003. OP-3 The efficacy of bariatric surgery in a HIV (+) and type 2 diabetic patient

Mehmet Nuri Koşar¹, Özkan Görgülü²

¹Department of General Surgery, SBÜ Antalya Education and Research Hospital, Antalya, Turkey; ²Department of Anesthesiology and Reanimation, University of Health Sciences Antalya Education and Research Hospital, Antalya, Turkey

Correspondence to: Mehmet Nuri Koşar. Department of General Surgery, University of Health Sciences Antalya Education and Research Hospital, Antalya, Turkey. Email: itfm97@yahoo.com.

Abstract: Obesity is one of the most common health problems. According to the Turkish data, there were 2,000,000 people with a body mass index (BMI) above 40 in 2018. According to the 2017 data from the ministry of health, it is estimated that there are 17,884 registered and 30,000 non-registered HIV + patients. In America and France, there are data showing that the incidence of obesity is increased in HIV (+) patients. The co-existence of obesity among HIV-infected patients is high, which has negative effects on the results of highly active antiretroviral therapy (HAART). In the literature, the publications on this topic are limited; however, there are positive reports in terms of comorbidity control and response to treatment in case reports and several case series presentations published in recent years. In our case report, we aimed to present a patient with obesity and HIV (+) with the results. A 39-year-old male patient was admitted to our outpatient clinic with the complaint of overweight on 09.11.2016. His history revealed that he had suffered weight problems for a long time, had diabetes and could not lose enough weight with diet. His physical examination showed that he did not undergo any operation and had no scars on his body other than tattoos. Endocrinology, psychiatry and dietician consultations, upper gastrointestinal (UGI) endoscopy and abdominal ultrasonography (USG) were performed for the patient with a height of 180 cm and a weight of 164 kg and a BMI of 50.6 in the evaluation. The patient who was scheduled for sleeve gastrectomy was diagnosed with AIDS during his routine preoperative evaluation. After the evaluation of infectious diseases, the patient was initiated on antiretroviral therapy. Emtricitabine/tenofovir

disoproxil 200 mg/245 mg per day, dolutegravir 50 mg/day, and Trimethoprim + sulfamethoxazole and azithromycin dihydrate 500 mg 3×1 day were started. The patient's diabetes was followed up in terms of metabolic syndrome. The patient who was on oral antidiabetic before antiviral therapy started to receive insulin. The patient treated and followed up by the department of infectious diseases between February 2017 and December 2018 was referred to us for bariatric surgery considering that he is in remission. The patient underwent sleeve gastrectomy on 06.03.2019. In the postoperative period, emtricitabine/tenofovir disoproxil 200 mg/245 mg and dolutegravir 50 mg/day were continued. Laboratory parameters that were seen to be impaired during antiviral therapy were not observed again following weight loss. Many studies on general population have suggested a positive correlation between obesity and comorbidities. Therefore, bariatric surgery has taken its place as an appropriate approach in the treatment of obesity and comorbidities. However, there are limited studies on the incidence of obesity and comorbidities in HIV-positive patients in the society, from which data can be obtained. It is obvious that the survival rates of HIV-positive patients have increased following the introduction of new generation antiviral drugs and the incidence of comorbidities and obesity is thought to have increased. A few small case series have reported that bariatric surgery is safe in HIV-positive patients. Mortality has not been observed in none of the patients in these series. Vitamin deficiency has been observed in three patients. In our case, oral replacement was performed in the third postoperative month upon the development of B12 deficiency. In a study by Chloé Amouyal *et al.* published in Obesity Surgery in 2018 investigating the efficacy of antiviral drugs in HIV-positive patients who underwent sleeve gastrectomy with a follow-up period of 36 months, it was argued that sleeve gastrectomy was effective in increasing drug efficacy and controlling comorbidities. Although there are few case series in the literature, we also observed that bariatric surgery was effective in the HIV-positive patient both in terms of the effectiveness of antiviral therapy and prevention of comorbidities.

Keywords: HIV; metabolic syndrome; sleeve gastrectomy

Provenance and Peer Review: This abstract is included in "Abstracts from the 3rd Turkish National Congress on Bariatric and Metabolic Surgery, 21st-24th November 2019, Antalya-Turkey", which is commissioned by the Guest Editor (Mehmet Mahir Özmen) for the series "Bariatric and Metabolic Surgery" published in *Annals of Laparoscopic and Endoscopic*

Surgery. This abstract did not undergo external peer review.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/ales-2019-bms-14>). The series “Bariatric and Metabolic Surgery” was commissioned by the editorial office without any funding or sponsorship. The authors have no other conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in

accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/ales-2019-bms-14

Cite this abstract as: Koşar MN, Görgülü Ö. The efficacy of bariatric surgery in a HIV (+) and type 2 diabetic patient. *Ann Laparosc Endosc Surg* 2020;5:AB003.