

Increased fractures: A new found risk of bariatric surgeryZuha Majid¹, Zara Shahzad², Muhammad Umar Nasir³

Madam, Bariatric surgery or "weight loss surgery" comprises a group of surgical procedures that help one lose weight by changing to one's digestive system. Bariatric surgery is prescribed in the Asian population if one's BMI is 35 or higher, 30 or higher with type 2 diabetes mellitus, or metabolic syndrome,¹ which lifestyle modifications and medical therapy cannot control. It has been proven to be a viable tool to combat the problem of increasing obesity and type 2 diabetes. Bariatric surgery can also reduce mortality in morbidly obese patients and insulin resistance in diabetics.²

However, bariatric surgery is not without its risks. Many nutritional and mineral deficiencies may occur following surgery such as protein malnutrition and anaemia.³ Additionally, a newfound risk of bariatric surgery is the increased risk of bone fractures. A case-control study with a long follow up of eight years reported a significantly higher prevalence of fractures (94%) in people who had undergone bariatric surgery compared with the control group, members of who received non-surgical weight management therapy (3.5%).⁴ Obese patients are known to have vitamin D deficiency related to secondary hyperparathyroidism⁵ Removal of a part of their intestine during bariatric surgery lowers the absorption of minerals compromising bone health, making them more fracture prone.

These findings should be seen as a matter of great concern in Pakistan where there is a surge in the popularity of bariatric surgery due to increasing obesity owing to sedentary lifestyles and high intake of fast food. Moreover, our population is prone to fractures and has low vitamin D levels.⁶ Therefore, we advise doctors to be highly cautious before suggesting bariatric surgery and should only prescribe the procedure when every diet and lifestyle modification has failed to improve the condition. Treating

physicians should pay careful attention to patients' calcium and vitamin D levels to prevent serious post-op complications. Follow-ups should be scheduled to assess mineral levels and bone density (BMD) in patients, and they should be encouraged to take vitamin D and multivitamin supplements. However, the question of proper dosing of vitamin D supplements for post-bariatric patients remains unanswered.⁷ Further research must be conducted in this field so we can uncover more about the little-known consequences of bariatric surgery and help improve the quality of life of post-bariatric patients.

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