

## **Abstract**

*Background:* Obesity and associated comorbidities increase the probability of sexual disorders. We aimed to assess sexual satisfaction in obese women before and after bariatric surgery using the validated Female Sexual Function Index (FSFI) and also to assess sexual satisfaction in obese women in comparison with women of normal weight. We also compared the frequency of female sexual dysfunction (FSD) of the participants.

*Methods:* 60 obese women (mean initial BMI of  $43.7 \pm 5.99$  kg/m<sup>2</sup>) completed the questionnaire on sexual satisfaction (FSFI) before a bariatric procedure (laparoscopic adjustable gastric banding, 22 women; gastric plication, 33 women; and biliopancreatic diversion, 5 women), 6 months and 12 months after the procedure, i.e. after a significant weight reduction (final BMI of  $35.5 \pm 5.5$  kg/m<sup>2</sup>). The control group consisted of 60 women of normal weight (mean BMI of  $22.2 \pm 1.9$  kg/m<sup>2</sup>). The FSFI assesses sexual function across 6 domains, with higher scores indicating better sexual function. The FSFI total score (range 2-36) of  $\leq 26.55$  is indicating FSD.

*Results:* Baseline sexual function in the preoperative obese female was significantly lower than in the control group of women of normal weight ( $p < 0.01$ ) in each domain. Average postoperative FSFI scores increased from preoperative levels in all domains, but significant improvement occurred only in the domain for desire ( $p < 0.01$ ). The results at 6 and 12 months after surgery did not show significant differences from each other. Before surgery, 31 obese women (51.6%) had scores indicative of FSD, while by 6 months postoperatively it was only 17 women (39.5%), and by 12 months postoperatively, 18 women (41.9%), had scores indicative of FSD. In the control group of women of normal weight, only 9 women (15%) had scores indicative of FSD. The FSFI total scores improved 12 months after surgery from  $20.1 \pm 11.7$  to  $23.7 \pm 11.5$ , but the FSFI total score in the control group of women of normal weight was  $30.3 \pm 3.5$  ( $p < 0.01$ ).

*Conclusion:* Women seeking bariatric surgery are obviously a population with substantial sexual function impairment, with nearly 52% of obese women showing FSD. Significant weight reduction achieved through bariatric procedure implied a reduction of sexual dysfunction in women.

**Key words** Obesity - Female - Bariatric surgery – Body mass index - Sexual dysfunction - Female Sexual Function Index