

## CHANGES IN PHYSICAL PERFORMANCE FOLLOWING BARIATRIC SURGERY IN ELDERLY PATIENTS

To the Editor:

During the last two decades there has been a dramatic increase in the prevalence of obesity in the United States, reaching approximately 35% of the population in 2008. Simultaneously, life expectancy has increased to 78.6 years. As a consequence, the number of people above the age of 60 years is expected to double by 2060. As the population continues to age, the proportion of obese patients above 60 years has reached 25%. In our era, bariatric surgery (BS) has become the mainstay of treatment for morbid obesity. Due to the popularity of BS we are facing an increasing prevalence of procedures in the aged population. Yet the long-term effects of BS in terms of physical function in this age group are still uncertain.

Given the paucity of literature, we aimed to objectively evaluate the physical performance of elderly patients ( $\geq 60$  years old) after BS. Our hypothesis was that BS would positively affect elderly patients' physical capacity. We prospectively assessed patients within a week before surgery and 6 months and 12 months postoperatively. Physical function was assessed by the Modified Physical Performance Test (MPPT) adopted from Apovian et al. [1]. The MPPT is an objective and a quantifiable test using observed performance of different tasks simulating normal daily activities. Sixteen patients were evaluated before surgery; 16 (100%) and 9 (56%) patients completed the 6 and 12 months postoperative evaluation, respectively. The operations performed were sleeve gastrectomy (n=9), Roux en Y gastric bypass (n=5) and adjustable gastric banding (n=2). Mean age was 64.8 (range 60–72) and mean body mass index  $42.0 \pm 5.1$  kg/m<sup>2</sup>. Mean excess weight lost (EWL) % at 1 year was 55.8%. At both 6 months and 1 year follow-up no significant changes were noted in the majority of tasks evaluated as compared to the preoperative

assessment. Significant improvement was demonstrated at 1 year when patients were asked to either write a sentence or walk ( $P = 0.05$  and  $P = 0.02$ , respectively).

To our knowledge this is the first report to describe the objective change in physical function among elderly patients undergoing BS. Our results show that performance capacity did not change in most tasks examined, except for improvement in writing a sentence and walking, which due to our small sample size could merely have been a chance finding.

In the younger population it was already demonstrated that BS can improve physical function [2]; however, only a few studies addressed this issue in the elderly. These studies utilized pre-formed questionnaires based on self-reported assessment of the patients [3,4]. The subjective improvement reported in these studies may actually represent a major reporting bias.

The lack of improvement in physical capacity seen in our study might potentially impede the ability of an elderly individual to perform physical activity. It is plausible that in this age group the role of physiotherapy and physical exercise after surgery should be even more emphasized.

Our study entails several limitations including its small sample size and the relatively short follow-up. Future studies with a larger sample size, a control group and longer follow-up are warranted to answer these unresolved questions.

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## GRANULOMATOUS MASTITIS: A PRACTICAL CLASSIFICATION SYSTEM

To the Editor:

We read with great interest the article by Mahlab-Guri et al. [1]. In their discussion on the diagnosis and treatment of granulomatous lobular mastitis, they assert: "The therapeutic approach includes observation alone or corticosteroids treatment in severe cases. Surgery should be avoided in granulomatous lobular mastitis patients."

We would like to express our opinion, based on some salient points. First, the seriousness or involvement of the disease is not similar in all patients so we cannot state that only one type of management procedure is preferred in all patients. We believe there must be a difference in the management of a patient with a small superficial uncomplicated mastitis in one breast and of a patient with extensive symptomatic disease with skin ulcerations, abscesses and fistulae. A practical and realistic clinical classification system that reflects the extension of the disease is required so that we can compare the results of the medical and surgical managements according to the type of granulomatous lobular mastitis being treated. Although granulomatous lobular mastitis was described by Kessler and Wolloch [2] in 1972, until now no worldwide accepted classification system has been proffered. From this standpoint, we propose an easy six-point classification system for granulomatous lobular mastitis.

- **Type I:** Limited superficial mastitis without abscess
- **Type II:** Mastitis with only abscess formation
- **Type III:** Mastitis with skin ulceration and fistulae
- **Type IV:** Complex mastitis with painful mass, skin ulceration, abscess, and fistulae in one or two breast/s
- **Type V:** Recurrent disease

- **Type IV:** Mastitis with secondary complication of tuberculosis, sarcoidosis, syphilis, foreign body reaction, vasculitis, fungal and parasitic infections, etc.

While the authors did not recommend surgery as a treatment modality for granulomatous lobular mastitis, others [2] have recommended surgical excision as a safe and effective method. Therefore, we should also know which patients are appropriate candidates for surgery. Without the above classification, recommending a standardized scientific management will be difficult.

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#### To the Editor:

**W**e thank Dr. Irkorucu for his comments. We agree with him that granulomatous lobular mastitis is a heterogeneous disease presenting in various forms and severity. The disease may present in one or both mammary glands, and it may be local or extensive [1]. As for the treatment, we agree with Dr. Irkorucu that it should be tailored to each patient according to the severity, the nature and the extent of the disease, and we made this point clear in our article [1]. Nevertheless, we as well

as others [2,3] recommend (as discussed in our report [1]) that the primary treatment for patients with granulomatous lobular mastitis should include observation and antibiotics with or without corticosteroids. Surgical intervention, mainly wide excision, should be offered to selected patients in whom all other modalities have failed [1].

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