

Our Experience in Medially Based Gluteus Maximus Muscle Flap Transfer for Stool Incontinence

Ahmed Moustafa, Mohamed Alatrash, Aya Alamrawy, Mohamed Raslan, Ahmed Farag
First Department, Department of General Surgery, Cairo University, Egypt

Abstract

Background: Fecal incontinence is defined as the involuntary or inappropriate passage of liquid or solid stool. It is a distressing condition, resulting in both physical and psychological problems that affect quality of life. *Objectives:* The objective of this study is to assess the effectiveness of medially based gluteus maximus muscle flap in the control of anal incontinence and compare it with other methods of gluteus maximus flap. Also, assessment of the electrical activity of the transferred muscle using electromyography during rest.

Methods: 22 patients with fecal incontinence were enrolled from the outpatient clinics of the General Surgery Department, Kasr El Aini Hospital, Faculty of Medicine, Cairo University. All patients had gluteus maximus muscle flap in the elective list in the colorectal unit.

Results: Our patients show clinical improvement in continence status postoperatively, with a Wexner continence score improving from a preoperative mean of 16.2 to a postoperative mean of 7.10 ($p=0.005$), and a Farag grade improving from a preoperative mean of 4.5 to a postoperative mean of 2.2 ($p=0.004$).

Conclusion: Unilateral medially based gluteus maximus transposition is a successful procedure for improving continence scores and anorectal physiologic parameters in most patients with faecal incontinence. Persistent traction on the neo-sphincter develops resting muscle tone similar to that of the EAS, as assessed by post-operative EMG.

Keywords: stool incontinence, muscle flap, gluteus maximus muscle