Comparative study between surgical lateral internal sphincterotomy and botulinum toxin injection in the treatment of chronic anal fissure.

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Introduction

Anal fissure is a longitudinal ulcer from below the dentate line to above the anocutaneous line. In 90% of cases, it is posterior. The second location is anterior commissure. In women, ~80% are posteriorly, whereas 20% occur anteriorly. Botulinum toxin (BTX) action is mediated by its action on the autonomic nervous system. The treatment goal for BTX is the interruption of the internal sphincter spasm. Indeed, sphincter manometry after BTX injection has demonstrated a lowering of resting internal pressure. The aim is to compare effectiveness of surgical lateral internal sphincterotomy (LIS) versus BTX injection. Patients and methods

A total of 60 patients were randomly allocated into two equal groups of 30 patients each: group I (lateral internal sphincterotomy group) and group II (BTX injection group). Results Chronic anal fissure can be successfully treated with surgical LIS with a 90% healing rate after 2 months, with no recurrence rate recorded, in comparison with a 70% healing rate in BTX injection, with a 20% incidence of recurrence. Conclusion

LIS is a satisfactory treatment for chronic anal fissure, being quick and easy to be performed with minimal complications. Recurrence is uncommon. BTX is safe and easy, with rapid relief of pain, with no risk of anesthetic or operative complications. It is relatively less invasive than surgical, with negligible complications, but it has a higher recurrence rate. The risk of anal incontinence is higher in the surgical group especially in elderly patients than BTX injection; therefore, BTX injection is preferred in middle aged and elderly patients, risk factor for anal incontinence, or those of recent complaint of anal fissure.

Keywords:

anal fissure, botulinum toxin injection, lateral internal sphincterotomy
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