

Letters to the Editor

STARR Procedure for the treatment of outlet obstruction syndrome

G REBOA *et al.*

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Dear Editor:

I read with interest the paper by Reboa *et al.* reporting good results after STARR procedure in a group of constipated patients. Less satisfactory results were achieved using the stapled transanal mucosectomy, first described by Pescatori, Favetta, Dedola and Orsini in *Techniques in Coloproctology* in 1997 for the treatment of rectal internal mucosal prolapse (and not, as stated by the authors, by Longo, who instead reported it for the cure of hemorrhoids one year later).

STARR is a novel operation which gained some popularity despite being introduced in the clinical routine prior to a randomized controlled trial showing its efficacy compared with other manual and less costly techniques. Unfortunately, the authors do not quote at all several important references underlying the limits and the risks of this novel procedure. These include the papers by Dodi *et al.*, *Tech Coloproctol*, 2003, reporting severe bleeding and pain; Jayne and Finan, *Br J Surg* 2006, criticizing the introduction in the clinical

practice before an adequate scientific evaluation; Pescatori *et al.*, *Int J Colorectal Dis* 2006, Bassi *et al.*, *Tech Coloproctol* 2007, describing postoperative recto-vaginal fistulae; Gagliardi *et al.*, *Dis Colon Rectum* 2006, reporting poor results in large rectoceles and a fatal pelvic sepsis; Arroyo *et al.*, *J Am Coll Surg* and finally Pechlivanides *et al.*, *World J Surg*, 2007, reporting high short-term reintervention and recurrence rate.

The same omissions are found on the website www.emorroidiestipsi.com in which transanal stapling supporters state that the STARR is an operation which carries no risk. This simply is not true.

The STARR is an appealing procedure, but its supporters should give the readers an honest and comprehensive review of the existing literature, including both pros and cons of the operation, aimed at minimizing the risk of failure, in the interest of the patients.

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Authors' reply

The original findings by A. Longo regarding stapler-assisted trans-anal surgery for the treatment of hemorrhoids and outlet obstruction syndrome are universally known. He is recognized as the leading author in this field and his reference in this paper is mandatory.

STARR is frequently quoted as a novel operation which has gained popularity despite being introduced in the clinical routine prior to a randomized controlled trial showing its efficacy compared with other manual and cheaper techniques. Actually, apart from a randomized trial including 50 patients by Boccasanta *et al.*,¹ this is a common limitation of many surgical procedures currently attempted for the resolution of outlet obstruction syndrome, and this should prompt the need to perform a randomized clinical trial in this setting.

However, literature data on STARR are currently available only on a few hundreds of patients, thus suggesting that the procedure still requires a careful prospective assessment as well as an adequate learning-curve that cannot be readily achievable with a few operations.

This was the true message of our report, avoiding any enthusiastic support to STARR with the primary aim of an objective assessment of the clinical outcome of these patients, supported by manometric and defecographic findings. Thanks to the comment of our reader, we now have another opportunity to stress that this is not "easy surgery". It requires a specialist approach that only the modern coloproctologist used to stapling devices can provide, and not the traditional proctologist. Moreover, a learning phase with a simpler procedure such as the stapled anopexy for the treatment of hemorrhoids is advisable, with at least 30 to 50 operations regarded as the cut-off before starting with STARR Procedure. As a matter of fact, looking at the complication rate, those Authors²⁻⁵ who dealt with a rather

low number of patients (less than 16 patients) experienced very poor results with a high rate of postoperative bleeding (14-21%), urinary retention (8-28%), pelvic sepsis (7%), urge to defecate (19-25%) and pain (7-28%) while the corresponding figures are remarkably lower with the increasing number of patients.⁶⁻⁷

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