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LETTER TO THE EDITOR

Refractory major LARS: stoma can wait

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Dear Editor:

We read with interest Dulskas' article entitled "Treatment possibilities for low anterior resection syndrome: a review of the literature" [1]. The author provides an analysis of possible treatment options for low anterior resection syndrome (LARS) after colorectal sphincter-preserving surgery, considering in detail results found in the literature. The need of awareness of this important subject is not trivial: a recent meta-analysis [2] has detected an estimated prevalence of major LARS of 41% (95% CI 34–48) at 1 year after surgery, and a multi-institutional survey [3] has shown how knowledge of therapeutic options is limited because about half of surgeons have only experience with dietary and drug treatment modalities.

From Dulskas' review, it seems clear that the current therapeutic leanings are toward conservative treatments or minimally invasive procedures according to the predominant symptoms. However, although decision-making algorithms [4] are very useful in the clinical practice, treatment of LARS still remains a challenge and a definitive stoma as possible solution for refractory major LARS.

In LARS, bowel dysfunction occurs mainly with incontinence and stool frequency, but clustering, urgency, and multiple evacuations affect quality of life in the same way.

In addition to the encouraging results obtained by transanal irrigation [5], it would seem that, according to recent studies, percutaneous endoscopic cecostomy (PEC) and antegrade enema could potentially be the last therapeutic option before resorting to definitive colostomy in refractory major LARS adding to those already mentioned in the review. Didailler et al. published functional outcomes of 25 patients treated by PEC for refractory major LARS for the first time [6]. There was a significant improvement of symptoms after PEC and antegrade enema: LARS score decreased from 33 (range 12–41) to 4 (range 0–41) ($p < 0.001$) and Wexner score from 16 (range 4–20) to 4 (range 0–16) ($p < 0.001$) with a reduction of major incontinence from 92 to 16% of patients ($p < 0.001$) after a median follow-up of 8 months. GIQLI score for quality of life showed a statistically significant increase too while failure rate was only 16%. Feasibility of PEC procedure in patients with LARS was confirmed only in another study [7] where it was considered successful in 9/10 patients. In this case, the mean Cleveland score for incontinence decreased from 14 before PEC to 3 after 6 months ($p < 0.01$) and an improvement of GIQLI score was observed: from 71 ± 21 to 118 ± 10 ($p = 0.01$).

Certainly more studies are needed to consolidate long-term outcomes as well as comparative assessments, but antegrade continence enema (ACE) procedures (Malone's technique, cecostomy, and ileal appendicostomy) have already been evaluated for fecal incontinence and functional constipation in a systematic review [8] showing an improvement in both scores and quality of life where described. Furthermore a meta-analysis [9] reported a pooled success rate in patients with fecal incontinence underwent to ACE procedures of 83.6%, appearing to be significantly more helpful in patients with fecal incontinence than in those with functional constipation, with a median follow-up of 39 months. The most frequent complications were wound infection, conservatively treated, and stoma stenosis whose surgical revision could be avoided by the prior placement of a indwelling cecostomy catheter [10].

Since bowel dysfunction is due to capacity and compliance reduction of the "neorectum," to colonic dismotility and anal sphinteric damage with decrease of anal resting pressure and absence of rectoanal inhibitory reflex [11] in LARS, mechanisms of defecation and continence are altered and their recovery may be delayed or absent in some cases. Therefore, in

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our opinion, planning the evacuation time with PEC and enema could represent a viable conservative therapeutic strategy for patients with LARS after failure of other treatments before definitive stoma, although selected and motivated patients, multidisciplinary team, and specialist nurse assistance are required.

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