Hemorrhoidal arterial ligation with mucopexy: A risk-free technique?

Dear Editor,

We read with considerable interest the study by Béliard et al. [1] comparing the Longo stapled anopexy versus echo-guided hemorrhoidal artery ligation with mucopexy. We also appreciated the editorial by Drs. G. Meurette and P.A. Lehur [2] assessing the future prospects of an “off-the-shelf” mini-invasive approach for hemorrhoidal surgery based on these innovative techniques. In these editors’ opinion, it still seemed premature to weigh in on the advantages of one technique over the other, even though they felt enthusiastic about hemorrhoidal arterial ligation, which seems to result in “very few complications”. In marked contrast to the Longo stapled anopexy, there have been, up to this time, no serious life-threatening complications reported for ligation with mucopexy in the published reports of this technique. In the English language literature, the procedure is described under the terminology of Hemorrhoidal Artery Ligation (HAL) and Recto-anal repair (RAR). In recent reports, the indications for HAL-RAR have been extended to include even Grade IV hemorrhoids because of the “lifting” effect of RAR [3]. The number of articles published on this subject is testimony to the undeniable interest of this new technique, but it is perhaps still too early to promote the procedure based on the argument that the technique is without risk.

We wish to contribute to this debate by reporting the first observation of pelvic cellulitis with extensive fascial necrosis following performance of HAL-RAR for prolapsing hemorrhoids. This complication developed in a generally healthy 55-year-old male with no significant co-morbidities on the fifth post-operative day after HAL-RAR; he presented with symptoms of fever, pelvic pain and dysuria, followed within a few hours by septic shock and lower abdominal tenderness with guarding. CT scan (Fig. 1) showed retrorectal gas infiltration extending laterally and anteriorly in the space of Retzius, and retroperitoneally from the left iliac fossa up to the cupula of the diaphragm. Debridement and drainage of areas of septic necrosis (Fig. 2) were performed via urgent laparotomy along with a diverting colostomy. At the level of the rectum, there was a posterior perforation due to transmural tissue necrosis at the level of the mucopexy; this was drained transanally. The two other sites of mucopexy also showed necrosis limited to the mucosal tissues, which was excised. Bacterial culture revealed *E. coli* and *B. fragilis*. The patient was treated with triple antibiotic therapy (piperacillin/tazobactam, amikacin, and metranidazole), parenteral hyperalimentation, and several sessions of hyperbaric oxygen treatment. The patient eventually recovered.

While extremely rare, there is a risk of severe septic complications for any type of instrumental intervention for hemorrhoidal disease. A systematic review by J.M. McCloud et al. in 2006 [4] collected complications (sometimes lethal) that occurred after the gamut of hemorrhoidal procedures.

![Figure 1. Pelvic cellulitis with gas dissecting the pre-sacral space and the space of Retzius.](image1)

![Figure 2. Anterior aspect of the bladder with zones of necrosis and hemorrhage.](image2)
Correspondence

from rubber band ligation to sclerotherapy, cryotherapy, surgical hemorrhoidectomy, and Longo stapled anopexy. It would be astonishing indeed if patients undergoing HAL-RAR were not also at risk.

Beyond the risks associated with poor mastery of a particular surgical technique with a long learning curve (as has been shown for the Longo stapled anopexy), the question arises of how to provide the patient with adequate information regarding the potential risks of innovative surgical techniques. While the complication of this particular case may be considered an unforeseeable occurrence, it should nevertheless make surgeons seriously reflect on the risks of performing surgical techniques that have not been fully validated. Surgeons and proctologists are more than ever in need of serious studies and recommendations from learned societies to justify their choices. We would also remind surgeons that, at this time, there is still no specific procedural code for HAL-RAR in the French system of procedure codes (CCAM – Classification Commune des Actes Médicaux).

Disclosure of interest

The author declares that he has no conflicts of interest concerning this article.

References


J.F. Gravié
Clinique St-Jean-Languedoc, 20, route de Revel, 31400 Toulouse, France
E-mail address: gravie.jf@wanadoo.fr
Available online 11 October 2014