1130-0108/2016/108/3/164-165
Revista Española de Enfermedades Digestivas

Rev Esp Enferm Dig (Madrid)
Vol. 108, N.º 3, pp. 164-165, 2016

Letters to the Editor

Minimally invasive treatment of rectovesical fistula: a case report

Key words: Rectovesical fistula. Transanal endoscopic surgery. Minimally invasive surgery.

Dear Editor,

Management of rectovesical fistulas (RVF) poses a significant challenge as they affect quality of life and cause persistent urinary infections or even abdominal sepsis (1). We report our first case of transanal endoscopic surgical treatment of RVF with a successful outcome.

Case report

A 57-years-old man with laparoscopic radical prostatectomy by neoplasia. During postoperative period, he presents fecaluria and pneumaturia. With a diagnosis of RVF, we perform a laparoscopic colostomy.

Cystoscopy does not show extravasation to rectum. With clinical data and positive urine cultures, we perform barium enema, showing the presence of RVF (Fig. 1A). After discussion, a transanal endoscopic surgical repair by transanal endoscopic operation is planned. We visualize the orifice of the fistula at anterior rectal wall (Fig. 1B) and perform a dissection of the fistula tract, followed by a resection, and we close by suturing (Fig. 1 C and D).

Three months after surgery the urine culture is negative and the barium enema does not show fistula tract (Fig. 1 E and F). For these reasons we perform a stoma closure, with no complications.

Discussion

Management of RVF is complex. The rate of spontaneous closure after urinary and/or fecal diversion has been reported to

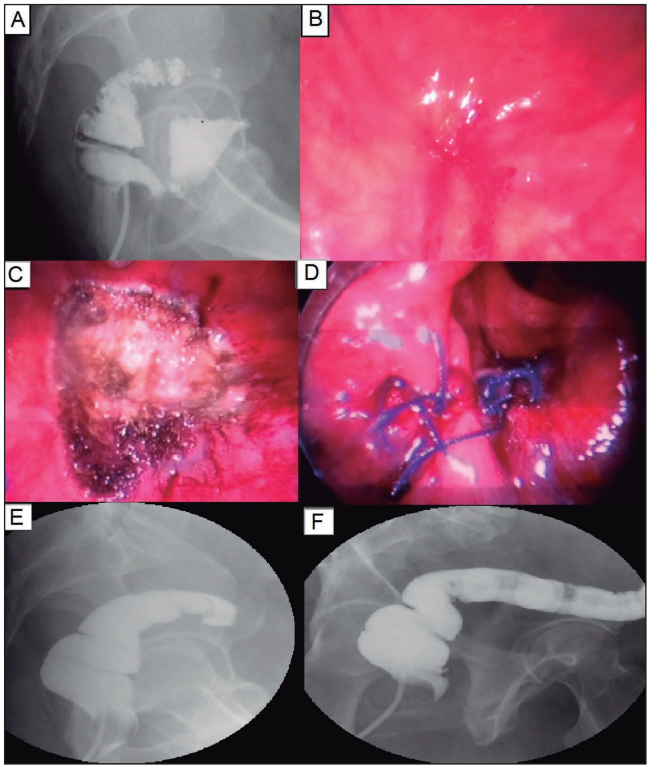

Fig. 1. A. Barium enema: rectovesical fistula. B. Fistula orifice at anterior rectal wall. C. After resection of the fistula by transanal endoscopic operation. D. Closure by suturing. E and F. Barium enema without rectovesical fistula.

be 14 to 46.5% (2), especially in small fistulas without history of radiation (3). This implies that a definitive surgical treatment is necessary in the majority of the patients.

A variety of surgical procedures has been described: transperineal, transsphincteric, conventional transanal or transabdominal approaches, implying that there is no consensus about a gold standard.

The overall success rate of surgical management of RVF is high, over 90%, regardless of a history of radiation or the procedure type, being debridement of the fistula tract to healthy tissue essential for the successful outcome (1). Traditional surgery is technically demanding, needs extensive dissections and jeopardizes continence (4,5).

The development of transanal endoscopic surgery, that was originally described to perform resection of early rectal tumors, and the increasing interest in minimally invasive surgery have led to use this technique for RVF repair (6-8). Its key points are the dissection of mucosa until the proper muscle is completely exposed, the resection of the mucosal layer and fistula tract and the closure of the defect by suturing (8). The most important advantages it provides are excellent the visualization of the surgical field and surgery without incision in healthy tissue. It is fundamental that this approach is carried out by skilled colorectal surgeons.

Recently, some favorable results by endoscopic treatments (cyano-acrylate injection or the scope clip) have been reported (9,10).

Therefore, several procedures have been described for the treatment of RVF. The application of transanal endoscopic surgery to RVF is safe, feasible and useful, adding the advantages of a minimally invasive surgery. In our experience, we consider that it is necessary to confirm healing before reversing stoma with barium enema to guarantee a successful outcome.

Alba Manuel-Vázquez, Francisco Javier Jiménez-Miramón, José Luis Ramos-Rodríguez and José María Jover-Navalón

Department of General and Digestive Surgery. Hospital Universitario de Getafe. Getafe, Madrid. Spain

References

1. Nfonsam VN, Mateka JJ, Prather AD, et al. Short-term outcomes of the surgical management of acquired rectourethral fistulas: Does technique matter? Res Rep Urol 2013;5:47-51.
2. Choi JH, Jeon BG, Choi SG, et al. Rectourethral fistula: Systematic review of and experiences with various surgical treatments methods. Ann Coloproctol 2014;30:35-41. DOI: 10.3393/ac.2014.30.1.35
3. Hechenbleikner EM, Buckley JC, Wick EC. Acquired rectourethral fistulas in adults: A systematic review of surgical repair techniques and outcomes. Dis Colon Rectum 2013;56:374-83. DOI: 10.1097/DCR.0b013e318274dc87
4. Razi A, Yahyazadeh SR, Gilani MA, et al. Transanal repair of rectourethral and rectovaginal fistulas. Urol J 2008;5:111-4.
5. Bochove-Overgaauw DM, Beerlage HP, Bosscha K, et al. Transanal endoscopic microsurgery for correction of rectourethral fistulae. J Endourol 2006;20:1087-90. DOI: 10.1089/end.2006.20.1087
6. Wilbert DM, Buess G, Bichler KH. Combined endoscopic closure of rectourethral fistula. J Urol 1996;155:256-258. DOI: 10.1016/S0022-5347(01)66612-6
7. Andrews EJ, Royce P, Farmer KC. Transanal endoscopic microsurgery repair of rectourethral fistula after high-intensity focused ultrasound ablation of prostate cancer. Colorectal Dis 2011;13:342-3. DOI: 10.1111/j.1463-1318.2010.02224.x
8. Kanehira E, Tanida T, Kamei A, et al. Trasnal endoscopic microsurgery for surgical repair of rectovesical fistula following radical prostectomy. Surg Endosc 2015;29:851-5. DOI: 10.1007/s00464-014-3737-x
9. Mangiavillano B, Pisani A, Viaggi P, et al. Endoscopic sealing of a rectovesical fistula with a combination of an over the scope clip and cyano-acrylate injection. J Gastrointest Oncol 2010;1:122-4.
10. Mori H, Kobara H, Fujihara S, et al. Rectal perforations and fistulae secondary to a glycerin enema: Closure by over-the-scope-clip. World J Gastroenterol 2012;28:3177-80. DOI: 10.3748/wjg.v18.i24.3177