Case Report

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Colovesical fistula, as a manifestation of cancer of the left colon: case presentation

Introduction

Colovesical fistulas are infrequent complications, being those of malignant origin unusual as etiology and often cause problems for their diagnosis.

Objective: To present the case of a colovesical fistula of malignant origin which is unusual.

Presentation of the case: a patient who entered our service with suspected colovesical fistula, because he had pain in the lower abdomen, pneumatoria and fecaluria, to corroborate said diagnosis by computed tomography, colon by enema with water-soluble contrast and cystography.

Discussion: Colovesical fistulas are rare in medical practice, being this unusual as a manifestation of colon cancer.

Conclusions: FCV should be suspected in all patients with pneumaturia, fecaluria, lower abdomen pain and palpable suprapubic tumor. Where cytoscopy, tomography and barium enema can give an etiological diagnosis in all cases.

Keywords: colovesical fistula, malignant, colon cancer, enterovesical fistula

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Introduction

Colovesical fistulas (FCV) are rare and the majority represent complications of diverticulitis in more than 80% of cases. Advanced tumors, which grow abundantly in the abdominal or pelvic cavity, are responsible for approximately 20-30% of FCVs. (1) FCVs most often originate from adenocarcinomas of the colon, but they can also occur as a consequence of neoplasms in other pelvic organs. (2,3) In any case, FCVs are observed in very advanced stages of neoplastic diseases. (4,5) This article presents a case of a patient whose initial manifestations of cancer of the colon turned out to be a colovesical fistula. As this is a rare entity in surgical practice and is an unusual manifestation of left colon cancer, we made this presentation.

Case presentation

61-year-old white female patient with previous health history (hysterectomy for uterine fibroid 02-03-2000). Who comes to our service for presenting pain in the lower abdomen, pneumaturia and fecaluria. On physical examination, a 5x7 cm tumor in the hypogastrium of hard consistency, with irregular edges, non-mobile and painful is palpable. Abdominal ultrasound is performed which reports a heterogeneous image of 7x6.5 cm supravesical in intimate relationship with the sigmoid colon, a contrasted abdominal computed tomography is requested (Figure 1), which reports intravesical hydroaereal level. A cystoscopy was performed, which confirmed our diagnostic suspicion of a colovesical fistula, and a biopsy punch was taken, which reported well-differentiated adenocarcinoma. A colon is performed by enema with water-soluble contrast (Figure 2), observing the colovesical communication, gorge image (sigmoid colon neoplasia), and addition images (sigmoid colon diverticulosis). With all the above elements, the patient is announced under the diagnosis of colovesical fistula, performing sigmoidectomy and partial cystectomy with immediate colorectal anastomosis and cystorrhaphy complemented with a catheter cystotomy (bladder carving). The patient evolves favorably and is discharged on the tenth day. The biopsy reports a well-differentiated mucoproducer adenocarcinoma.

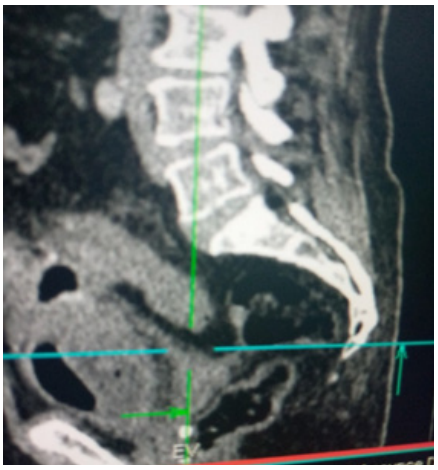

Figure 1 The intravesical air-fluid level is observed.

Figure 2 It shows the abnormal communication between the sigmoid colon and the bladder. In addition, an image of the gorge and addition images are observed.

Discussion

Based on the literature, it appears that fistulas between the bladder and the digestive tract are rare and often cause diagnostic problems. Within the enterovesical communications, the colovesical fistula (FCV) is the most frequent (70%), followed by ileovesical (16%) and rectovesical (11%). It is more common in males in a ratio of 3: 1 and the decades with the highest prevalence are the sixth and seventh.[1,2] Women who suffer from FCV, in more than 90% of cases, are hysterectomized women.

The most common cause of colovesical fistula is diverticular disease of the sigmoid colon (66-75% of cases).[3–5] The underlying mechanism is the direct extension of a ruptured diverticulum or the erosion of a peridiverticular abscess into the bladder, and the mechanism by which colon cancer can take the bladder abscess from the tumor or infiltrate the bladder dome. Most patients (> 90%) with colovesical fistula usually present with recurrent urinary infections and dysuria. Pneumaturia is present in 71% -90% of cases and fecaluria in 51% -76%, both signs considered pathognomonic signs of FCV.[5,6] For diagnosis, cystoscopy visualizes the lesion in almost 90% of patients. In some cases, CT with contrast in the rectum and sigmoids helps to localize the abnormal communication. In our case, we use what we believe to be the tripod for the topographic and etiological diagnosis of this entity, such as cystoscopy, contrast abdominal tomography and the colon by enema with water-soluble contrast. The first can observe the abnormal communication, can see elements of chronic cystitis, presence of intravesical air and taking a biopsy of the lesion, in the second shows an intravesical air-fluid level, which is pathognomonic, defines thickening of the walls and defines etiology (diverticular disease or tumor of the sigmoid colon), the third study shows the abnormal communication clearly, precise etiology images of addition in the diverticular origin and images of stenosis or defile in the malignant cause. Bannura et al.[1] mention computerized axial tomography as the gold standard for the diagnosis of this entity, followed by barium enema and cystoscopy.

The differential diagnoses of this entity will be between the main causes of colovesical fistulas (diverticular disease, Crohn's disease, history of radiation at the pelvic level, cancer of the pelvic excavation) or between possible abnormal communications between the digestive tract and the bladder wall (colovesical, ileovesical, and rectovesical fistula).[1,2,7]

Currently, the surgical treatment of VCF regardless of its etiology is not controversial and the standard surgery is resection of the affected sigmoid colon segment with immediate anastomosis. This resection can be performed in the traditional way as in our case, or laparoscopically with similar results.[6–8] Although the laparoscopic approach to a FCV is feasible and safe, it requires a trained team with great experience in colon resections. Unless there is a suspicion of a tumor lesion, it is not necessary to resect part of the affected bladder and usually a simple suture and decompression offered by the urethrovesical catheter are sufficient. Universally the procedure performed is sigmoidectomy with immediate colorectal anastomosis and partial cystectomy with cystorraphy and catheter cystostomy (bladder size), the latter being optional, in our case we performed a transverse colostomy days before for derivative purposes and as protection of the colorectal anastomosis.[9,10] Another technical element used in our case that is not recorded in previous studies[2,6,8] is the use of bladder size or catheter cystostomy, which we consider to be a standard procedure in all bladder raffia.

The role of the derivative colostomy in these high-risk surgical patients is controversial, but, in general, we believe that better preparation of the colon is warranted, eliminating the source of the urinary infection in these patients, and safely performing a colorectal suture, which We consider high disruption rates or fistulas as an anastomosis.[1,7,9]

Conclusion

Colovesical fistula is a rare entity, being even rarer as a presentation of left colon cancer which should be suspected in all patients with pneumaturia, fecaluria, lower abdominal pain and palpable suprapubic tumor, where cystoscopy, tomography and barium enema can give an etiological diagnosis in all cases.

Acknowledgments

None.

Conflicts of interest

The authors declare no conflicts of interest.

Author contributions

Héctor Alejandro Céspedes Rodríguez: Search for information and confirmation of the document.

Daniel Alejandro Tello Duanes: Confirmation of the document.

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