

Appendico-vesical Fistula in a Woman

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INTRODUCTION

Appendico-vesical fistula is a rare disease for which a precise diagnosis is often difficult to make.⁽¹⁾ The clinical presentation is recurrent urinary tract infections with or without gastro-intestinal symptoms.⁽²⁾ As the symptoms are not specific, usually there is a large interval between the onset of symptoms and the final diagnosis.⁽³⁾ The most accurate diagnosis tools are through imaging by cystography and cystoscopy and, or followed by computed tomography (CT) cystography.⁽⁴⁾

CASE REPORT

A 30-year-old woman was referred to our clinic for evaluation and treatment of the unresolved bacteriuria. She complained of a chronic right lower abdominal pain for 5 years. Meanwhile, she had a history of pneumaturia and fecaluria since 1 year ago. There was no other past medical or surgical disease. Urine culture showed growth of Escherichia Coli (E. Col). Cystourethroscopy revealed a small opening on the right lateral wall of the bladder dome. Passage of a guidewire through the fistula tract was unsuccessful. A CT cystography was requested which showed a suspicious communicating tract between the appendix and bladder and presence of air inside the bladder cavity (Figurers 1 and 2). Colonoscopy was done for rule out of bowel disease like Crohn's disease which was normal.

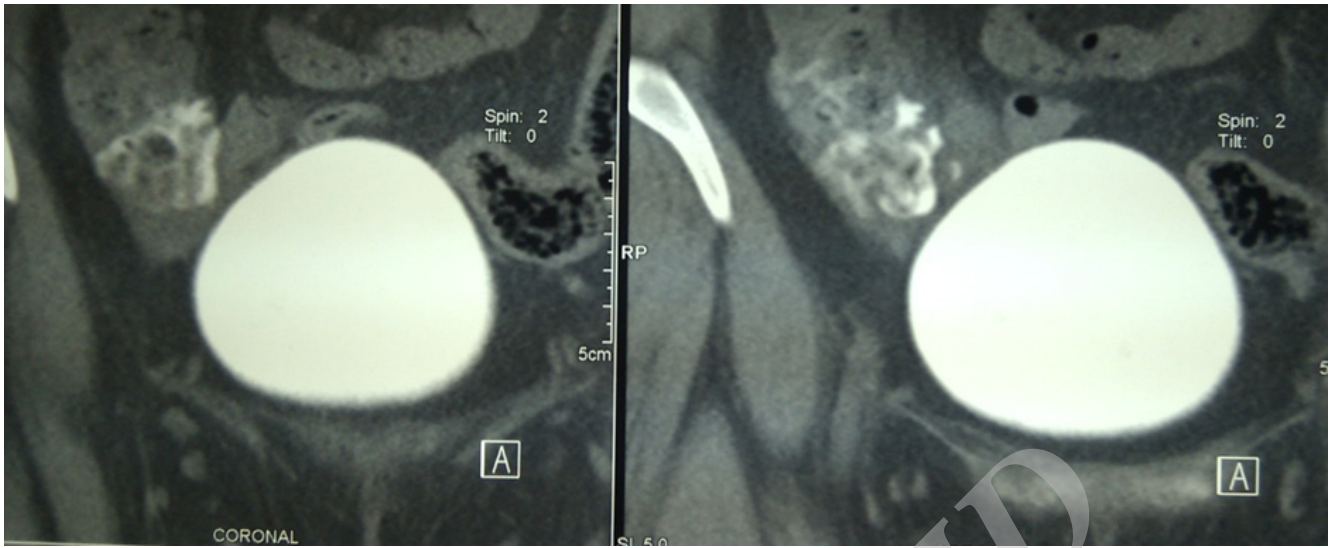


Figure 1. Coronal view of cecum, bladder and fistula in computed tomography cystography.

With an impression of appendico-vesical fistula, the patient was operated through an infra umbilical midline incision. The right lateral side of the bladder dome was strongly adhered to the distal part of the thick appendix with a fine fistulous tract. After the ligation of the appendicular base blood supply with 2-0 Vicryl suture, the fistulous tract was resected. Bladder was repaired in two layers with zero Vicryl suture and omental flap was interposed between the cecum and bladder. Postoperative period was uneventful and the patient was discharged after third post-op day. The

Foley catheter was removed in the 7th post-op day. The pathology of the specimen was chronic inflammation of appendix without malignancy.

DISCUSSION

Appendico-vesical fistula is a very rare complication of appendicitis.⁽¹⁾ It occurs more common in males at the range of 10 and 40 years old.^(1,5) The lower incidence in females is attributed to the interposition of the uterus between the bladder and the intestine.⁽²⁾ Although more than 100 cases

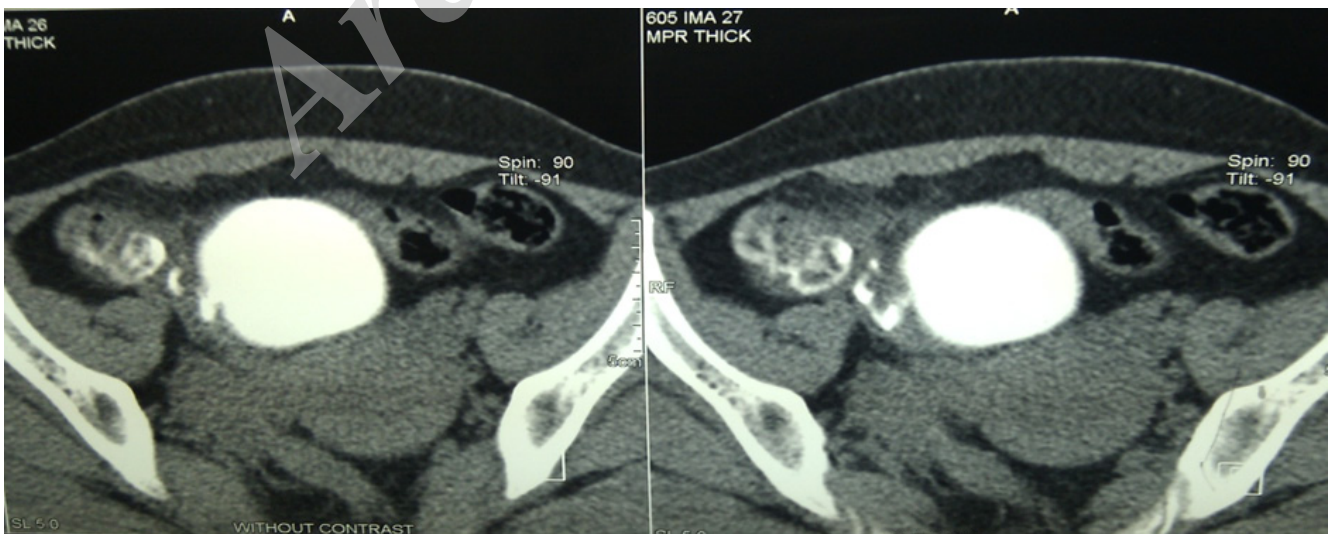


Figure 2. Transverse view of cecum, bladder and fistula in computed tomography cystography.

have been reported in the literature in last decades, Only a few cases were female.^(6,7) The most common symptoms of appendicovesical fistula are unresolved urinary tract infection, lower abdominal pain and pneumaturia.^(2,8)

As the symptoms are occasionally non-specific and the usual diagnostic tool cannot easily demonstrate the disease and the precise pre-operative diagnosis is difficult to make.⁽³⁾ So that, it may be delayed for more than 1 years for definite diagnosis.^(3,8) Diagnostic tools are cystourethroscopy, cystography and CT scan. CT cystography has been introduced as the most accurate diagnostic test.⁽⁴⁾ Appendectomy and repair of the bladder wall is the principle treatment of appendicovesical fistula.⁽⁹⁾

CONFLICT OF INTEREST

None declared.

REFERENCES

1. Rainauli Z, Mekokishvili L, de Petriconi R. 15-year history of spontaneous appendico-vesical fistula (case report). *Georgian Med News*. 2012 ;205:7-11.
2. Abubakar AM, Pindiga UH, Chinda JY, Nggada HA. Appendico-vesical fistula associated with Hirschsprung's disease. *Pediatr Surg Int*. 2006;22:617-8.
3. Bigler ME, Wofford JE, Pratt SM, Stone WJ. Serendipitous diagnosis of appendicovesical fistula by bone scan: a case report. *J Urol*. 1989;142:815-6.
4. Goldman SM, Fishman EK, Gatewood OM, Jones B, Siegelman SS. CT in the diagnosis of enterovesical fistulae. *AJR Am J Roentgenol*. 1985;144:1229-33.
5. Steel MC, Jones IT, Webb D. Appendicovesical fistula arising from appendiceal diverticulum suspected on barium enema. *ANZ J Surg*. 2001;71:769-70.
6. Afifi AY, Fusia TJ, Feucht K, Paluzzi MW. Laparoscopic treatment of appendicovesical fistula: a case report. *Surg Laparosc Endosc*. 1994;4:320-4.
7. Athanassopoulos A, Speakman MJ. Appendicovesical fistula. *Int Urol Nephrol*. 1995;27:705-8.
8. Kawamura YJ, Sugamata Y, Yoshino K, et al. Appendico-ileo-vesical fistula. *J Gastroenterol*. 1998;33:868-71.
9. Albrecht K, Schumann R, Peitgen K, Walz MK. Laparoscopic therapy of appendicovesical fistula -- two case reports. *Zentralbl Chir*. 2004;129:396-8.