INTERNATIONAL JOURNAL OF ADVANCED BIOLOGICAL RESEARCH

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Short Communication

APPENDICULAR FISTULA: UNUSUAL PRESENTATIONS

Alok Mohanty, John Mathew P., Sudeepta Kumar Swain, S., Robinson Smile
Dept. of General Surgery, Mahatma Gandhi Medical College & Research Institute, Pondicherry – 607402, India.

ABSTRACT
Even though acute appendicitis is common, attachment of the appendix to the surrounding viscera can occur, but the presence of a fistula between the appendix and another viscous is rare. Though few cases of appendico-vesical and appendico-cutaneous fistulas have been reported, appendico-colic fistula is very rare, particularly with transverse colon. Here, we are reporting a rare case of appendico - colic and appendico- cutaneous fistula.

KEY WORDS: Appendix, Fistula, Cutaneous, Colon.

INTRODUCTION

Inspite of the frequency of acute appendicitis, persistence of a patent fistula between the appendix and another viscus is rare (Kim and Baik 2006). A case is presented, of an appendico-transverse colic fistula that developed as a result of previous inflammatory processes. The other case was of an appendico-cutaneous fistula which developed after an emergency appendicectomy.

CASE 1:

A 63 year old lady presented with history of lower abdominal pain, dysuria for 1 month associated with intermittent vomiting, loss of appetite and weight. There was a tender mass of size 5 x 4cm palpable in the right iliac fossa, firm in consistency and mobile in horizontal plane. Laboratory studies revealed a Hb of 7.6 gms% and a white blood cell count of 17400/mm3. Blood chemistry was within normal limits. USG abdomen revealed a thickened appendix and terminal ileal loops. Contrast CT scan of the abdomen showed irregular thickened caecum.

A provisional diagnosis of carcinoma caecum was made. Thus, right hemicolectomy was planned. On exploration, it was found to be, an irregular adhesive mass in the right iliac fossa, consisting of terminal ileum, caecum and appendix along with the mid transverse colon. Mid part of transverse colon was thickened at the site of adherence to appendix. On opening the lumen of transverse colon, an ulcer was noted with an opening at the centre which was communicating to the tip of appendix. A small bore infant feeding tube was passed through the fistulous tract which was going easily into the appendicular lumen. Rest of the peritoneal cavity and other viscera were normal. Adhesions were released. Appendicectomy and limited resection of mid tranverse colon with end to end anastomosis was done. Post-operative period was uneventful.

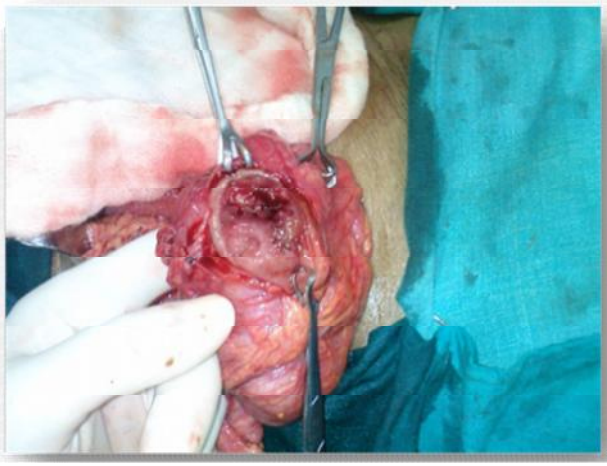

Fig. 1: Per Operative photograph showing the fistulous tract.

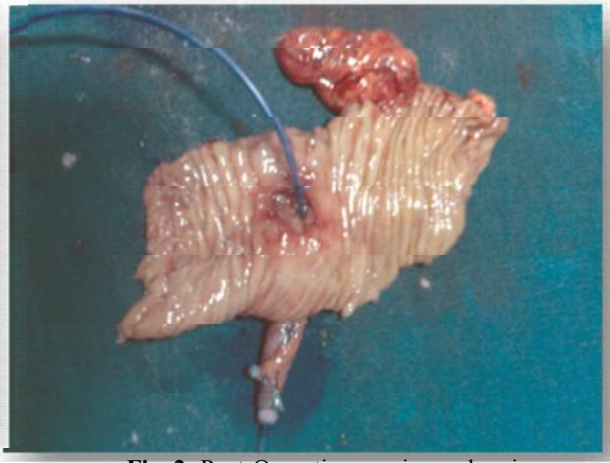

Fig. 2: Post-Operative specimen showing the fistulous opening in the transverse colon.

Histopathological examination revealed nonspecific colitis, colonic ulceration with a fistulous tract communicating into appendicular lumen. Section from the appendix showed features of chronic appendicitis.

CASE 2:

A 25 year old gentleman, presented with a discharging sinus in the right iliac fossa following emergency appendicectomy one year ago. The sinus was discharging sero-purulent secretion. No H/O pain over the site of sinus. On examination, there was an indurated ulcer, 0.5cm x 0.5cm over the appendicectomy scar in the right iliac fossa, discharging sero-purulent secretion. There was no palpable mass. Blood parameters were within normal limits. Provisional diagnosis of chronic sinus in the RIF was made and the patient was taken up for sinus exploration. Methylene blue dye was injected into the sinus, sinus tract traced and dissected along, which was extending into the peritoneal cavity and reaching the tip of the appendicular stump, approximately 4cm long. Excision of the fistulous tract along with the appendix was done. Histopathology report revealed chronic appendicitis with fistulous tract

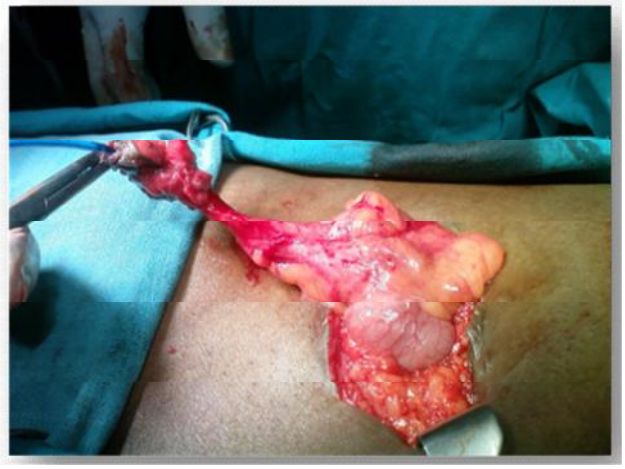

Fig. 3: Per Operative photograph showing the fistulous tract.

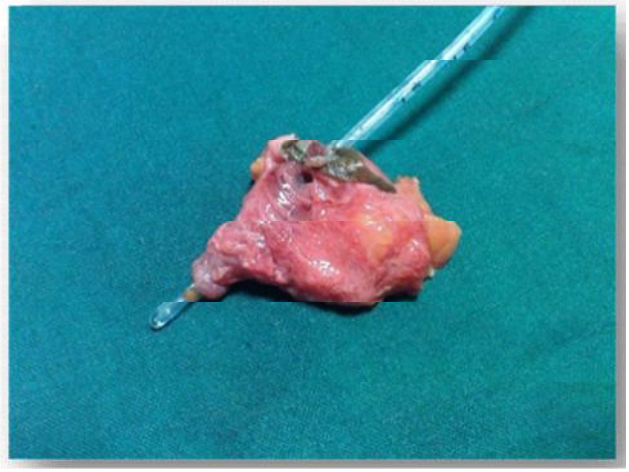

Fig. 4: Post-Operative specimen showing the fistulous tract infiltrating the skin.

DISCUSSION

Perforation of the appendix into neighboring viscera is an uncommon sequel to acute appendicitis and persistence of the fistula between the appendix and a viscus is even more rare (Thomas *et al*, 1968). Various types of fistulous communication reported are appendicovesical, appendicointestinal, appendicouterine and appendicocutaneous (Nanni *et al.*, 1981). According to Kjellman, the main mechanism of formation of the fistula is the spontaneous rupture of inflamed appendix into the adjacent bowel or the skin and persistence of fistula is due to the presence of appendiceal calculus or carcinoid tumor or tuberculosis (Kjellman 1957; Jagdish *et al.,* 1996). Appendico cutaneous fistula following appendicectomy is very rare. Hyett has reported incomplete appendicectomy as a major cause (Hyett 1995), as in our case. The treatment of appendiceal fistula is appendicectomy, excision of the fistulous tract and closure of the defect (Kim and Baik 2006; Muthukumarassamy *et al*, 2006). No recurrence is expected if there is no other associated pathology.

REFERENCES

Kim, H.S. and Baik, H. K. (2006) Appendico-Colonic Fistula. J Korean Surg Soc. 71, 308-311.

Thomas, L., Dent, M. D., Timothy S. and Harrison, M. D. (1968) Persistent Appendiceal-Sigmoid Fistula. AMA Arch Surg. 96, 309-311.

Nanni, G., Bergamini, C. and Bertoncini, M. (1981) Spontaneous appendicocutaneous fistula: Case report and literature review. Dis Colon Rectum. 24, 187-90.

Kjellman, T. (1957) Appendiceal fistula and calculi: review of literature and a report of three cases. Acta Chir Scand. 113, 123-39.

Jagdish, S., Ninan, S., Pai, D. and Ratnakar, C. (1996) Spontaneous appendicocutaneous fistula. Indian J Gastoenterology. 15:31.

Hyett, A. (1995) Appendicocutaneous fistula: A hazard of incomplete appendicectomy. Aust NZ J Surg. 65, 144-148.

Muthukumarassamy, R., Shankar, R., Sistla, S. and Jagdish, S. (2006) Appendico-cutaneous fistula. Indian J Surg. 68, 318-319.