



Late Postappendectomy Faecal Fistula

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Abstract

Introduction: Appendectomy is one of the most common surgical intervention. Partial appendectomy may allow for potential late complications.

Presentation of Case: We present the case of a patient with an enterocutaneous fistula, that occurred four years postappendectomy. Following surgery it was discovered an appendico-cutaneous fistula through the presence of a blunt long, dehiscence cutaneous appendix. The completion of the appendectomy led to healing.

Discussion and Conclusion: An appendix stump too long may cause the emergence of a appendico-cutaneous fistula.

Keywords

Faecal fistula; Stump appendicitis; Appendico-cutaneous fistula

Introduction

Acute appendicitis is the most common cause of acute surgical abdomen and appendectomy is one of the most common abdominal surgeries in the field. Incomplete appendectomy forfeits in the peritoneal cavity the appendix tip or an appendix stump too long [1]. It is recommended that the remaining appendicular stump length should be <0.5 cm [2]. Incomplete appendectomy is more commonly seen in the context of acute appendicitis, but was also seen in the case of chronic appendicitis [1]. The remaining segment can be a source of immediate complications (peritonitis, abscess, fistula purulent) or late ones (inflammation, abscess, fistula) [1]. The inflammation of the remaining appendix stump (stump appendicitis) has the same symptoms as those of primary appendicitis.

Case Report

We present the case of a patient age 25, with mild mental retardation who was hospitalized on our ward in September 2014 showing a stercoral fistula at the post-appendectomy scar level in the right iliac fossa, with a daily flow of about 20-30 ml. Anamnesis the fistulous drainage debut was 3-4 weeks ago, after a spontaneous evacuation of a parietal abscess. To note that the patient was operated for acute appendicitis at the territorial hospital in 2010. In the postoperative period the patient was transferred to another surgical section showing a necrotizing fasciitis in the right iliac fossa, with slow healing per secundam. Later, in 2012 the patient returned, presenting a right iliac

fossa abscess that required incision. The patient is admitted in good general condition, afebrile, showing bowel movements, and no other significant pathological complaints. Local exam of the postoperative scar in the right iliac fossa, showed a fistulous orifice diameter of 1.5 cm. On exploring it, was visualized under the aspect of intestinal lumen. Biological samples were not modified and the abdominal fluoroscopy without hidroaerice levels or pneumoperitoneum. On September 24, 2014 the patient is operated on under spinal anesthesia through a McBurney incision in the right iliac fossa that circumscribed the fistulous hole. Excision of the scar tissue and of the ulcerated and inflamed skin area is performed. It was identified a proximal appendix bunt of 2.5 cm length, having the distal end bent fixed to the abdominal wall (Figures 1 and 2). We proceeded to the completion of appendectomy with inverting the stump (Figures 3 and 4). Postoperative evolution was uneventful. She was discharged on the fifth postoperative day. Histological examination of the resected specimen revealed an inflamed appendiceal stump. A follow-up consult one month after surgery showed a patient in good general health with no symptoms (Figure 5).

Discussion

Complications encountered after appendectomy include wound-site infection, postoperative ileus, intra-abdominal abscess, and leaks from the remnant stump [3]. The fact that the diagnosis of stump appendicitis is usually not considered as the possible etiology for right lower quadrant abdominal pain in patients with prior appendectomy creates a delay in making the correct diagnosis and explains why the rate of perforation for stump appendicitis approaches 70% [4]. The

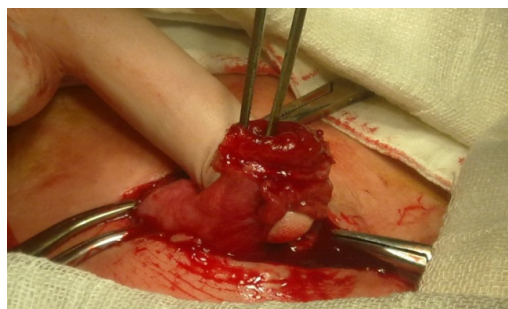


Figure 1: Identifying the remnant appendix stump.

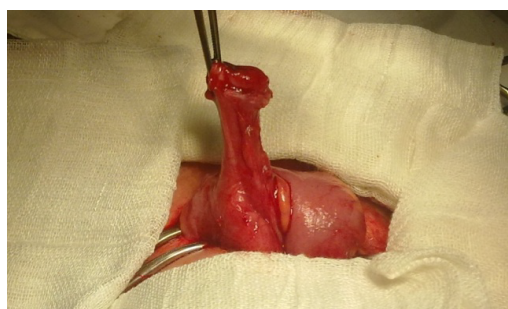


Figure 2: Dissected appendix stump.

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Figure 3: Appendectomy with inverting the stump.



Figure 4: Excised Stump.



Figure 5: The view of operation site after one month surgery.

first to describe stump appendicitis for patients who had previously undergone an appendectomy for appendicitis was Rose in 1945 [5]. It is defined as the interval re-inflammation of any residual appendiceal tissue after appendectomy [2]. This complication can occur both after the classical appendectomy and after the laparoscopic one. Because of the lack of a 3-dimensional view and lack of tactile feedback, some authors consider that laparoscopic appendectomy is a risk factor for stump appendicitis [5]. The time from appendectomy to the development of stump appendicitis ranges from 2 months to 21 years. The length of the stump ranges from 1.3 cm to 5.1 cm [6]. The common acquired causes of enterocutaneous fistula include strangulated groin hernia especially femoral hernia, tuberculosis and other granulomatous infections, diverticular disease of the bowel, Crohn's disease, carcinoid tumour and carcinoma of the caecum and appendix [7], foreign body, radiation, nutritional debilitation, and distal obstruction [8]. It bears serious social, psychological, medical and nutritional hazards [8]. An appendicocutaneous fistula was first described by Volz in 1846 at autopsy [9]. Cutaneous fistula may develop after drainage of appendix abscess or after appendectomy or

it may develop spontaneously as a complication of acute perforating appendicitis or as a hazard of incomplete appendectomy [10-12]. Complete surgical removal of an inflamed appendix is the treatment for stump appendicitis.

Conclusion

During appendectomy should be avoided leaving a long appendix blunt as it may cause complications. Among the causes of stercoral fistula may include apendico-cutaneous fistula. The differential diagnosis of a right iliac fossa pain of a patient with appendectomy, the possibility of stump appendicitis should not be overlooked.

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References

1. Setlacec D, Aşchie I (1999) *Complicații severe postappendectomie*. Bucureşti: Ed. Medicală.
2. Kanona H, Al Samaraee A, Nice C, Bhattacharya V (2012) Stump appendicitis: A review. *Int J Surg* 10: 425-428.
3. Çiftci F, Abdurrahman I, Tatar Z (2015) Stump Appendicitis: A Clinical Enigma. *Chirurgia* 110: 562-564.
4. Awe JAA, Soliman AM, Gourdie RW (2013) Stump Appendicitis: An Uncompleted Surgery, a Rare but Important Entity with Potential Problems. *Case Reports in Surgery*: 972596.
5. Constantin V, Popa F, Carâp A, Socea B (2014) Stump Appendicitis – An Overlooked Clinical Entity. *Chirurgia* 109: 128-131.
6. Mentés O, Zeybek N, Oysul A, Onder SC, Tufan T (2008) Stump appendicitis, rare complication after appendectomy: report of a case. *Ulus Travma Acil Cerrahi Derg* 14: 330-332.
7. Singal R, Gupta S, Mittal A, Gupta S, Singh M (2012) Appendico-cutaneous Fistula Presenting as a Large Wound: a Rare Phenomenon – Brief Review. *Acta Med Indones* 44: 53-56.
8. Shamim M, Haider SA, Iqbal SA (2009) Persistent appendiceal faecal fistula following a complicated open appendectomy. *J Pak Med Assoc* 59: 181-183.
9. Hyett A (1995) Appendiculocutaneous fistula: a hazard of incomplete appendectomy. *Aust NZJ Surg* 65: 144-145.
10. Koak Y, Jeddy TA, Gidings AEB (1999) Apendico-cutaneous fistula. *J R Soc Med* 92: 639-640.
11. Chowdhury DAH, Hassan MF, Rahman M, Anwar AB, Khatun S (2008) Spontaneous appendico-cutaneous fistula, after drainage of a right loin abscess – A case report. *Int J Surg* 6: 97-99.
12. Haoudi KE, Majdoub KI (2014) Fistule appendiculo-cutané: complication rare de l'appendicite aiguë. *Pan African Med J* 19: 194.

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