Appendicular Torsion

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Abstract

Torsion of the vermiform appendix is a rare condition detectable only at operation. It can be primary or secondary. This is a case report of 52-year-old female with 180° anti-clockwise rotation of the appendix. Torsion can further leads to strangulation and infarction of the organ. Appendicular torsion could be included in the differential diagnosis of pain in right iliac fossa.

Keywords: Anti-clockwise, appendix, primary, secondary, torsion

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Introduction

Acute appendicitis presents with pain in right iliac fossa. Torsion of the vermiform appendix, though rare, also presents in a similar fashion, and it is detectable only at operation.[1]

Case Report

A 52-year-old female presented with pain in the right iliac fossa, since 8 days and fever since 3 days. Clinically, the patient was febrile (101°), with tachycardia and guarding in the right iliac fossa with rebound tenderness. Total leucocyte count was 18,300/mm^3. Ultrasonography of abdomen showed only probe tenderness in right iliac fossa. A diagnosis of acute appendicitis was made, and an emergency appendectomy was performed. Intra-operatively, there was evidence of torsion of the vermiform appendix with a counter-clockwise rotation of 180°, around 1.5 cm from the base of the appendix [Figure 1]. The length of the appendix was approximately 8 cm and it appeared to be inflamed. The cut section did not show any remarkable pathology. The postoperative period was uneventful. Histopathology confirmed the diagnosis of acute appendicitis.

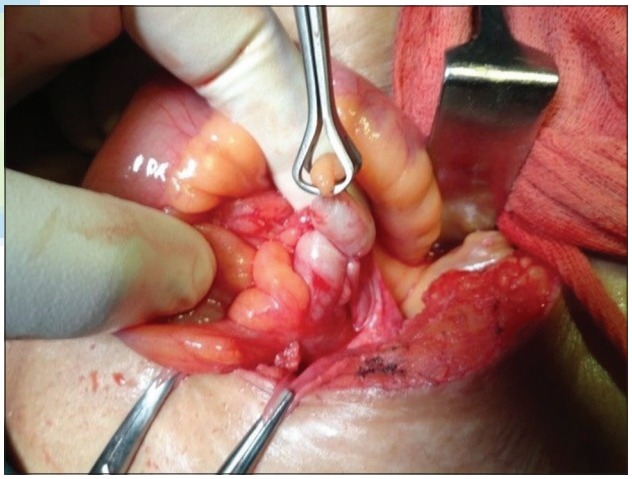

Figure 1: Appendicular torsion

Discussion

Appendicular torsion first described by Payne in 1918,[2] occurs along with the long axis of the appendix and is located at least 1 cm from its base. The degree of torsion is usually between 180° and 1080°.[3] The direction is most commonly anti-clockwise.[4] The torsion causes luminal obstruction, compromising the blood supply leading to strangulation, and infarction that presents clinically as an acute abdomen.[4] It can be primary or subsequent to other pathological conditions like faecolith, mucocele, carcinoid tumor or lipoma. A fan-shaped mesoappendix with a narrow base, long appendix can

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cause primary torsion. The site of torsion is variable and could be at the base or about 1 cm or more distal to the base.[5] The present case is of primary torsion with a counter-clockwise rotation. Ultrasound is of little value in diagnosing this condition preoperatively. Uroz-Tristan *et al.* have mentioned a case in which ultrasonography detected torsion of the appendix along with inflammation.[6] It is uncertain if the inflammation causes the torsion or vice versa.[7] Once the torsion has started, venous obstruction and, later arterial occlusion combine to jeopardize the life of their supplied structure, the presence of bacterial life in a twisted organ might be expected to be especially severe and productive of symptoms and signs, easily distinguished, and of rapidly increasing severity.[8]

Conclusion

Appendicular torsion has a similar clinical presentation like acute appendicitis. Preoperative diagnosis is difficult. This entities could be included in the differential diagnosis of pain in right iliac fossa.

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Conflicts of interest

There are no conflicts of interest.

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