

Case report of a Mega-Appendix: Longest Non-Perforated Appendix

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ABSTRACT

The appendix remains to mesmerize the surgeon in its presentations, pathologies and even functions. Acute appendicitis is the most common cause of an “acute abdomen” in young adults. Open appendicectomy remains the management of choice for acute appendicitis and is one of most frequently performed urgent emergency operation by the surgeon in training. The intraoperative appearance of appendix can be deceiving and even at times challenging even for an experienced hand. The saying goes

“approach every appendicitis, as a unique case”. The size of appendix varies from individual to individual the average being 6 to 9cm in length and 7 to 8mm in diameter. The maximum length of appendix recorded so far in country is 17.5cm and globally is a case of a perforated appendix of 55cm long. We present a case report of one of the longest non-perforated appendix removed, so far in India, measuring about 18.2cm in length and 7.6cm in its largest circumference.

Keywords: Acute appendicitis, Acutely inflamed appendix, Open appendicectomy

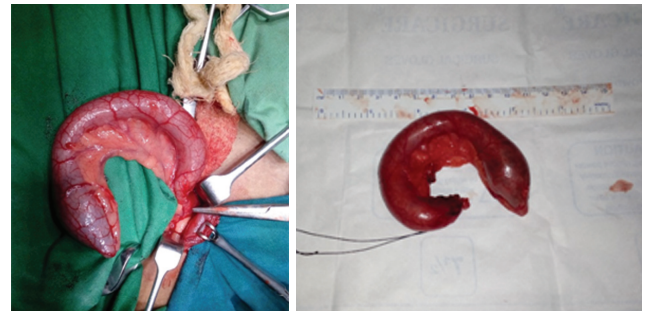
CASE REPORT

An 18 years old male presented to the Emergency Department with complaints of pain in abdomen that was stabbing in nature and associated with high grade fever since one day. He also complained about nausea and 5 episodes of vomiting. On examination patient was febrile and his vital signs were stable. The pain started from periumbilical region and later got localized to the right iliac fossa, fever was intermittent in nature and subsided on medication. There was no past medical history of similar episodes were reported by the patient. The abdomen showed tenderness and guarding in the right iliac fossa without any distention or discolorations. The hernial orifices and scrotum were normal. The bowel sounds were present. The bowel and bladder habits were normal. Ultrasonography of abdomen was suggestive of acutely inflamed appendix.

Informed consent was obtained from patient and emergency appendicectomy was performed. Operative exploration revealed an inflamed retrocecal non perforated appendix of size 18.2cm excluding the stump (0.5cm), with the greatest circumference being 7.6cm near the tip [Table/Fig-1 & 2]. Histopathological examination confirmed the diagnosis of an acutely inflamed appendix.

The patient was asymptomatic and discharged on the 3rd post-operative day. He was further followed-up on the

7th postoperative day in OPD and was doing well clinically. The surgical site showed signs of healing with no signs of infection.



[Table/Fig-1]: Operative view showing the appendix operated in our case.

[Table/Fig-2]: The appendicectomy specimen in our case.

DISCUSSION

The earliest regard of acute appendicitis as a clinical entity was reported by Reginald Fitz, who presented a paper ‘Perforating inflammation of the vermiform Appendix’ to the Association of American Physicians in 1886 [1]. This was followed by Charles McBurney’s description of classical manifestations of acute appendicitis including the point of maximum tenderness [2]. Even though the first half of twentieth century saw a drastic increase in the rate of appendicectomy, the rate has fallen

down dramatically in the last 30 years making the individual lifetime risk of appendectomy as 8.6 in males and 6.7 in females [3].

The risk of acute appendicitis is rare in infants, the risk increasing in childhood and early adult life. The male to female predisposition is equal for acute appendicitis before puberty. In teenagers and adults the male to female ratio increases to 3:2 [4].

The hypothesis regarding the etiology of acute appendicitis remains varied. Low dietary fibre with increased carbohydrate stands as an important factor as in colonic diverticulosis. This stands supportive of the observations that incidence of appendicitis is lowest in communities with high fibre intake and high in developing countries adopting a 'refined western diet' [5]. However, the incidence of appendicitis is being dramatically decreasing in western countries for the last 30 years. This can be attributed to the improved hygiene and change in the gastrointestinal flora pattern due to increased childhood antibiotic usage [6].

The lumen of the appendix is irregular with multiple longitudinal mucosal folds. There are few crypts base in which lies argentaffin cells (Kluchitsky cells) that may give rise to carcinoid tumours. The appendix is the most common site of carcinoid tumours that may present as acute appendicitis occluding the appendiceal lumen [7]. Other common causes obstructing the appendiceal lumen and present as appendicitis are fecolith and stricture [8].

The earlier recorded longest appendix removed from a patient in India was 17.5 cm long while globally the longest appendix removed is measured at 55 cm. The appendix removed from our patient measured 18.2 cm long and measured 7.6 cm

in its greatest circumference at the tip, making our case the longest appendix removed in the country so far.

CONCLUSION

The presentation of acute appendicitis still stands as a clinical challenge to the surgeon. The intra operative appearance of appendix can be deceiving. Histopathological diagnosis should be followed to confirm any untoward pathologies.

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