

ATYPICAL APPENDICITIS

Khalid Masood, Muhammad Akhtar

Combined Military Hospital, Mardan

INTRODUCTION

It is very easy for a clinician to label the patient as having appendicitis when he presents with classical symptoms and signs. However this disease is notorious in its ability to simulate other conditions and in the frequency with which it too can be imitated by other pathologies. The emergency surgeon must appreciate that the decision that needs to be made when considering the possibility of appendicitis is not whether the diagnosis is correct but whether an operation is indicated.

CASE REPORT

A 09 years old male child, presented with pain in left lower abdomen for one day. Pain started from peri-umbilical region, then migrated to the left lower abdominal quadrant. Child vomited frequently and did not pass stools for the next 24 hours. He lost his appetite and had fever of 101° F. Physical findings included a pulse of 112/min and a Blood Pressure of 90/60 mm/Hg. The patient's entire abdomen was diffusely tender, especially in the left iliac fossa with involuntary guarding. Rebound tenderness was also present. His complete blood count showed raised TLC (12000/ cmm) and urine was clear. X-Rays plain abdomen showed air filled loops of small and large bowel with a few air/fluid levels. Having a clinical clue of peritonitis, his laparotomy was planned after resuscitation and abdominal cavity was opened via a lower mid-line incision. Small gut was found slightly distended and cecum was lying in the left iliac fossa due to its free mobility. Distal ileum and cecum were full of round worms; two of them had penetrated into the lumen of appendix leading to obstructive appendicitis. Appendectomy was done and most of the worms removed from the luminal hole at the base of appendix and remaining were milked in sigmoid colon. Appendicular base was closed by transfixing with catgut and then buried in the cecum. The cecum was repositioned and fixed in

right side of the abdominal cavity.

DISCUSSION

The variations in the pathophysiological development of the disease, coupled with wide range of possible positions of the organ explain why only 50% of patients have classical history on presentation [1]. One must bear in mind the various standard and less common sites of appendix, which include retro-cecal in 75% cases, pelvic (20%), paracecal (3%) and parailial (2%). Acute appendicitis has also been seen in inguinal, femoral and even in umbilical hernias [2]. Appendicitis in a patient with mal-rotation gives tenderness far from the right iliac fossa [1,2]. The presence of undoubted peritoneal irritation in the abdomen is a cardinal indication for surgery, but certainly how to proceed is based on the presence of involuntary guarding or percussion tenderness rather than tenderness alone.

However when things are equivocal and diagnosis is confusing, it is better to wait for 3-4 hours, so that the patient can be examined again and in the mean time get help by some other measures or diagnostic criteria. Evaluation of the Alvarado score or other scoring systems in the diagnosis of acute appendicitis is very helpful in such conditions [3, 4]. These are mainly based upon the clinical presentation of the patient followed by examination findings and getting help by the baseline investigations. Certain advanced investigations can help in picking up the exact diagnosis. These include USG, CT scan and laparoscopy. Among these the USG, being available almost everywhere, is very helpful in diagnosis by related findings and exclusion criteria [5]. Ultrasonography is an investigation with 96% sensitivity and 94% specificity and accuracy rate of 95% in the diagnosis of acute appendicitis [6]. Laparoscope has been found to be very helpful not only to confirm the diagnosis but also for successful appendectomy by an expert laparoscopic surgeon [7]. Diagnosis needs to be established before perforation occurs as reduction in morbidity and mortality depends upon

Correspondence: Maj Khalid Masood, Classified Surgical Specialist, CMH Mardan

prevention of perforation. The greatest need for improvement lies in young children and elderly, in whom the incidence of perforation reaches 75% or higher [8]. Delay by the patient or the parents may be unavoidable, but failure on part of the physician to recognize the disease is disturbing. In one series of children with appendiceal perforation, 40% cases had been seen by a physician who failed to make the correct diagnosis before perforation [8]. In emergency, when the diagnosis is confusing, the surgeon must have no hesitation in opening the abdomen and experience no shame in the discovery of a normal organ.

REFERENCES

1. Hamilton Bailey's emergency surgery; 13th ed. London: **Arnold, Hodder Headline Publishers 2000; 399.**
2. Qureshi MI, Durrani KM. Surgical audit of acute appendicitis. **Proc Shaikh Zayed Postgrad Med Inst 2000; 14(1): 7-11.**
3. Malik KA, Khan A, Waheed I. Evaluation of the Alvarado score in diagnosis of acute appendicitis. **J Coll Physicians Surg Pak 2000; 10(10): 392-4.**
4. Ijaz A et al. Scoring system for the diagnosis of acute appendicitis. **Pak J Surg 2000; 16 (3-4): 37-40.**
5. Chaudhry TH et al. Acute appendicitis; role of Ultrasonography in the diagnosis. **Professional Med J 2000; 7(2): 174-83.**
6. Larson JM, Pierce JC, Ellunger DM, Parish GH. The validity and utility of sonography in diagnosis of appendicitis in the community setting. **Afr. Am J Roentgenology JC: 1989; 153 (4): 687-91.**
7. Bloch MA, Mengal MA, Boughti QA. Laparoscopy assisted appendectomy with 5mm telescope. **J Surg Pak 2000; 5(4): 26-7.**
8. Lawrence W.Way. Current surgical diagnosis and treatment; 10th ed. **Printed in USA: Appleton & Lange Publishers 1994: 612-13.**