

Case Brief

13 years old female presented with Pain for 4 days in the right iliac fossa which wasn't associated with radiation. A USG of the abdomen showed omental thickening with interloop bowel fluid in right iliac fossa. Admitted, the patient was started on antibiotics and IV Fluids since she was within normal limits of temperature and pulse. On the 3rd day post-admission, it's seen that the patient's lower abdomen is having rebound tenderness and there is muscle guarding, and the patient is running a fever of >101 degrees Fahrenheit and is tachycardic.

Q.) What's your Provisional Diagnosis, and how would start the next line of treatment?

A) The above case is based on an actual patient who was admitted in the surgical ward of CNMCH, Kolkata. The case states a 13 year old female child who presented with RIF pain which wasn't associated with radiation. Now children are often unable to give accurate history regarding pain and radiation for obvious reasons.

As a surgeon, we would suspect appendicular pathology.

However, in a 13-year-old child who has started menstruating important differential diagnosis must be thought of such as UTI, mesenteric adenitis and many more.

On examination, no obvious lump was felt in the RIF. Lump formation in the RIF occurs when the greater omentum i.e. the policeman of the abdomen tries to contain the inflamed appendix and as a result forms an appendicular lump. However, this patient had a USG report which showed omental thickening In the RIF hence there was a suspicion towards early lump formation.

The patient was admitted and started on the famous "Ochsner-Sherren" regimen which means the patient was made NPO ("Nil per mouth") and started on recommended IV fluids and antibiotics.

If there is gradual clinical improvement of the patient while on the regimen i.e. temperature and pulse are within normal limits with gradual resolution of the abdominal pain, we can say that conservative management is working.

On the 3rd day of admission during our evening rounds, we noticed the patient had a high temperature, tachycardia and signs of peritoneal irritation (rebound tenderness) and muscle guarding. The above are indications to stop conservative management as it is obvious the patient is clinically deteriorating. Emergency USG of the abdomen was planned which showed significant intra-abdominal collections. Hence there was a definite indication to operate in this patient and the patient was moved immediate to the OR for emergency laparotomy. Our suspicion was that an abscess had formed after appendicular perforation and the omentum had failed to contain the infection leading to peritonitis.

The operation - Exploratory Laparotomy with peritoneal lavage and appendectomy

Incision- Infraumbilical transverse incision given.

Findings - Intraabdominal pus with appendicular tip perforation. Steps - Abdomen opened - Pus sucked out - peritoneal lavage done - appendectomy done - abdominal drain given in the pelvis -hemostasis secured - abdomen closed in layers with Looped monofilament No. 1-PDS - Skin closed with 2-0 ETHILON. Post-operative period was uncomplicated and patient was discharged in stable condition.

Best Answers given by - Achyut Kanungo (3rd Prof Part 1, IPGMER-SSKM Hospital) and Aniruddh Agarwal (R. G. Kar Medical College and Hospital)