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RESEARCH ARTICLE

DENGUE FEVER MIMICKING ACUTE APPENDICITIS: A CASE REPORT.

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Abstract

Abdominal pain with dengue fever are often a diagnostic challenge. Typically, pain is localised to the right iliac fossa pain. Patients can even present with acute abdomen. we tend to report a case of a lady with dengue fever and right iliac fossa pain. The designation of acute appendicitis was created only once four days of admission. associate appendicular mass was noted throughout CT scan. The patient recovered afterward with conservative management . options suggestive of acute appendicitis are persistent right iliac fossa pain, localized peritonism, persistent fever and leucocytosis. repeated clinical assessment is important to avoid missing a coinciding diagnosing like acute appendicitis.

Introduction:-

Dengue fever is an acute viral disease, estimated incidence of 50–100 million patients per year [1]. Usually presents through 3 clinical phases. It begins with a febrile phase followed by the critical phase then recovery phase. Rarely, patient may presents with abdominal symptoms that present like acute appendicitis [2]. There are few reports of surgical appendectomy during dengue fever

Case presentation:

17-year-old girls presented to Emergency room complain of lower abdominal pain and vomiting for two days. Her condition started with fever, chills and body aches for six days. The abdominal pain that began in the epigastrium then it shifted to the right iliac fossa, associated with had anorexia, nausea and vomiting

On Physical examination her temperature was 37.6◦C, pulse rate 110 beet per minute and 110/75 blood pressure. Abdominal Examination was tender over the right iliac fossa with mild guarding and positive rebound tenderness. Complete blood count showed thrombocytopenia and leucopenia. Haemoglobin and haematocrit were normal.

Patient underwent abdominal ultrasound but it was not helpful as it showed only minimal fluid collection in right iliac fossa and appendix was not visualized. Plain X-ray of abdomen was within normal no sign of perforation . A abdominal CT scan were done that showed dilated appendix with distended lumen , thickened and enhancing wall peri-appendiceal inflammation, including stranding of the adjacent fat and thickening of the lateroconal fascia or mesoappendix , the appendicolith identified .

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The surgical team planned for surgery but it was cancelled due to refractory high fever , the patient continue on conservative management includewell hydration and analgesia , at that time the tests for malaria and typhoid fever were negative. Results of septic work up were also negative. Dengue fever was suspected blood sample was taken and sent for the laboratory .

On the 5th days of admission the patient still on conservative management her condition suddenly improved , abdominal examination were normal , Dengue fever was the diagnosis and confirmed by IgM capture enzyme-linked immunosorbent assay against Dengue virus (MAC-ELISA) .

After fever subside , we communicate with surgical team , another CT scan o abdomen were order and showed the normal visualized appendix and with no sign if inflammation .

Patient was discharge to homeafter clinically improve , vitally stable with OPD appointment after two week , she now complete eight month without any abnormality .

Dissociation:

Dengue fever is common in tropical countries as well as India and Saudi Arabia with frequent outbreaks in water collection area [3.4].The virus has four serotypes and is transmitted by "*Aedesaegypti*" and "*Aedesalbopictus*" [4]. Dengue fever sometimes presents as an acute symptoms ; musculoskeletal pain, nausea, vomiting, and petechial rash [4,5]. Dengue fever might be present as acute abdomen pain leading to diagnostic mystery. The acute surgical complications that associated with dengue fever ;acute pancreatitis, acute acalculous cholecystitis, nonspecific peritonitis and acute appendicitis [6–7]. The incidence of acute abdominal signs in dengue fever has ranged from 4.3% to 12.04% [8, 9].

A research have been reported twelve cases of dengue fever mimickingappendicitis. All twelve patients came with right iliac fossa pain and tenderness , on other hand eight of twelve patients having leucopenia. 10 out of twelve patients had thrombocytopeniaat the time of admission [7].

Acute appendicitis was found in one patient who underwent appendectomy in this series. To our knowledge, no complicated acute appendicitis in patients with DHF/DSS has been previously reported. Thrombocytopenia was observed one day before the surgery in this patient, the surgery was cancelled until thrombocytopenia resolved .

In a series of patient another research have been reported.[9] all patients that came wihacute abdominal pain had complications of dengue fever ; dengue haemorrrhagic fever or dengue shock syndrome. alternative theories projected to clarify acute abdominal pain in patients withdengue fever ; plasma leakage and serious effusions .[8,10] The Indicators which might suggest acute appendicitis are right iliac fossa pain, evidence of localized peritonitis , persistent fever and leucocytosis. Imaging modalities like ultrasound or CT scan of the abdomen could also be needed to assist elucidate the explanation for abdominal pain in uncertain cases.

we tend to were lucky that our case had drop in the platelet count as this would have led to delay in surgery and cancelled the booking due to full recovery of the patient. In the event of thrombocytopenia and coagulopathy, bleeding intra orpostoperatively may complicate surgery. [11]

Conclusion:-

Diagnosis of dengue in most of the cases may be created by suggestive clinical options , but in our case we were not missed the initial presentation was of acute abdomen that give us clear diagnosis . So it is important that surgeon in dengue endemic areas remember of this overlapping presentation in order to stop unnecessary surgeryrelated morbidity or may be mortality.

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