



Case Report

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Spontaneous Abdominal Wall Hematoma: A Rare Case Report with Review of Literature



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Abstract

Introduction: Abdominal wall hematoma, caused by rupture of superficial abdominal vessel (most commonly epigastric vessels) or muscle tear, is most frequently encountered in association with anticoagulation therapy, trauma, operation, and hematologic disorder. It rarely occurs spontaneously.

Case report: We report a case of abdominal wall hematoma in a 55-year-old female without any predisposing factors and not on any anticoagulants. It was managed symptomatically.

Conclusion: Spontaneous Abdominal wall hematoma though a rare identity but should be kept in mind as differential diagnosis as it can have a varied course and has to be treated promptly.

Keywords: Epigastric vessels; Abdominal wall hematoma

Mini Review

Spontaneous rectus sheath hematoma is an uncommon condition which has preponderance for elderly females, particularly on anticoagulant [1] therapy or chronic abdominal straining. It may mimic any acute abdominal disorder. Hence awareness of this rare clinical entity is very important. Computerized Tomography is diagnostic [2] with strong clinical suspicion USG can be enough [3]. The treatment is largely conservative [4]. Here we have described a case of spontaneous rectus sheath hematoma.

Case Report

Spontaneous abdominal wall hematoma is a rare condition. In this report, we present a case of a 55 Year-old female who came to R.L. Jalapa hospital, casualty with right lower abdominal pain which was sudden in onset and gradually progressive, was stabbing type of pain after a bout of coughing. Was none radiating. The patient had history of cough with expectoration since 5days which mild in nature and subsided with antitussive and expectorants. She had bluish discoloration in periumbilical and right lumbar and right iliac fossa since one day (Figure 1). There was no past history of fever, vomiting, trauma, any chronic ailment. She did not have any bleeding diathesis and was not on any anti coagulants.

On examination, her vitals were normal. There was tenderness and guarding in periumbilical and right iliac fossa. Clinically, differential diagnosis of Acute appendicitis, acute pancreatitis, and rectus sheath hematoma was made. Periumbilical discoloration was thought to be Cullen's sign. On laboratory investigations, her haemoglobin was 10.7 g/dL, urine examination was normal, total leucocyte count was 11.87 T/cumm, Blood urea 19mg/dL, Blood sugar 98mg/dL, serum sodium 132 m Eq/L, serum potassium 4.6mEq/L, serum amylase 75 U/L and INR was 1.04. Ultrasound (USG) showed. Features concerning for Rectus muscle hematoma versus evolving abscess.



Figure 1: Clinical photograph of the patient.

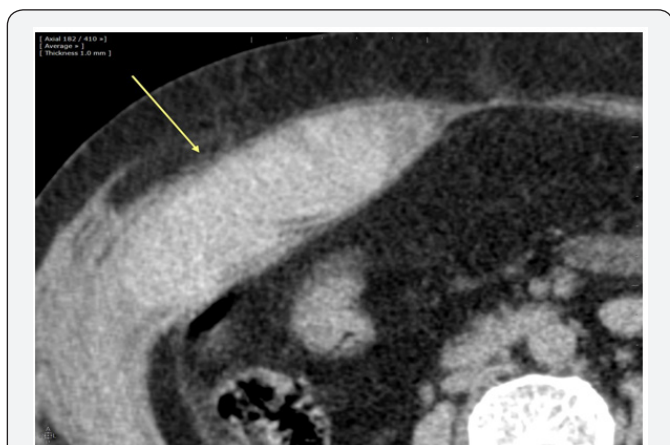


Figure 2: CT abdomen showing hematoma in rectus muscle axial view.



Figure 3: CT abdomen showing hematoma in rectus muscle Saggital view.

Plain CT abdomen (Figure 2 & 3) revealed diffuse intra muscular hematoma in Right internal oblique and rectus sheath muscle based on these investigations, diagnosis of spontaneous rupture of inferior epigastric artery was made. She was treated conservatively and had improved symptomatically. At 2 months follow up her skin discoloration had completely resolved.

Discussion

The rupture of epigastric artery leading to rectus sheath hematoma is well described in the literature [5-7]. Anatomically, the inferior epigastric artery ascends between posterior rectus sheath and rectus abdominis muscle. The loose attachment of the branches of inferior epigastric artery to the muscle puts it under stretch during strong muscular contractions. Moreover, cases with vascular degeneration are further prone to vessel rupture even with mild cough [8]. Superior epigastric artery traverses the abdominal wall between posterior sheath and rectus muscle until it anastomoses with the inferior epigastric artery at the level of umbilicus. The rupture of superior epigastric artery is much rare.

There are many predisposing factors known to cause rectus sheath hematoma viz. anticoagulants, coughing [8], sneezing,

lifting heavy weight, straining at stools or micturition, abdominal wall trauma, previous or recent abdominal surgery, subcutaneous injection, cardiovascular disease and pregnancy. Out of these, most common factor is anticoagulant therapy. Although, there are several reports of spontaneous rectus sheath hematoma, but most of the times, the precipitating factors are not recognized. The typical presentation is acute abdominal pain, nausea, vomiting and fever. On examination, hematoma is felt as a lump in the abdominal wall above the arcuate line in superior epigastric artery rupture and below the arcuate line in inferior epigastric artery rupture.

The lump may not be always palpable because it is situated deep to the rectus abdominis muscle, especially in obese patients. On leg raising in supine position, the lump becomes fixed and more tender due to its location in the abdominal wall. (Fothergill sign). Most of the cases can be managed conservatively and operative intervention should be avoided [9]. But in cases where haemorrhage continues Angio-embolization should be considered [10-12].

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