Spontaneous Rectus Sheath Hematoma: Case Report

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ABSTRACT
Rectus sheath hematoma denotes a collection of blood in the rectus sheath. This is known complication of abdominal trauma, surgery and excessive strain on the abdominal musculature. It can mimic most other abdominal emergencies, like acute appendicitis, diverticulitis, pancreatitis, or ruptured aortic aneurysm. Uses of anti-platelet and anti-coagulant therapies are risk factors, which lead to an increase incidence in patients without obvious precipitating events. Common symptoms are abdominal pain, abdominal lump and fever. Blood investigation indicate fall in hemoglobin and platelet counts. USG is useful radiological investigation but CT scan is method of choice. Management is conservative monitor hemoglobin and coagulation profile, prognosis is usually good and resolution occurs in most patients. Invasive procedures and surgery are associated with morbidity and rarely required.

Case Report:
A 60 year old female presented with complaint of sudden onset pain in the right iliac fossa and vomiting since 1 day. She also had low grade fever since 7 days back. No history of trauma, straining activity, anti-platelet or hormonal replacement therapy.

On admission Patient is haemodynamically stable. On abdominal examination tenderness is present in right iliac fossa with palpable lump of approx. 8x6 cm size. Fever profile was done which was positive for dengue IgM. Ultrasonography of abdomen is suggestive of appendicular lump. CT -scan abdomen showing 11.3x6.5x3.67 cm size rectus abdominis muscle hematoma, with one of the branches of right inferior epigastriac artery traversing through the rectus muscle hematoma. A patient was managed conservatively in view of normal coagulation profile and hemoglobin. Injection vitamin K, antibiotics and strap dressing given and abdominal girth were monitored. Size of the hematoma was seen to decrease over a period of 5 days. Course of patient in hospital is uneventful and Patient discharged on 7th day.

Discussion:
Rectus sheath hematoma is a collection of blood in the rectus sheath which is secondary to disruption of blood vessels coursing through it or injury to the muscle itself. It is more frequent in females and the elderly. [1, 2] Blunt or penetrating trauma, surgical trauma, pregnancy, collagen vascular disorders, blood dyscrasias, use of antiplatelet therapy and strenuous exercise are known predisposing factors for rectus sheath hematoma. Rectus sheath hematoma when occurs without any previous history of trauma is referred to as spontaneous rectus sheath hematoma. Unnoticed trauma like straining during defecation, chronic cough and anticoagulation therapy are proposed etiologies for spontaneous Rectus sheath hematoma. Rectus sheath hematoma above the arcuate line is usually self-limited because, tamponade effect of rectus sheath and the tendinous inscriptions of the rectus muscles. Hematomas below the arcuate line bleed more profusely, they dissect the tissue planes extensively and commonly extend across the midline. This is due to the absence of a tendinous posterior sheath wall in this area. Rectus sheath hematoma can mimic other abdominal emergencies, such as acute appendicitis, pancreatitis, diverticulitis or ruptured aortic aneurysm. Patients commonly present with symptom of abdominal pain, abdominal lump and fever. On palpation tenderness

Fig. 1 - CT SCAN image showing of Rectus Sheath Hematoma.

Fig. 2- image of local part.

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and swelling in the parietal wall. Abdominal pain, fall in hemoglobin level and presence of risk factors (especially anticoagulation therapy) is clinical clues to the diagnosis of rectus sheath hematoma. Tenderness which remains same or increases with head rising is referred as Carnett’s sign. [4, 5] Gray Turner’s and Cullen’s sign can be seen in late cases. Abdominal wall pathology is a commonly overlooked as a cause of acute abdomen, which leads to delays in diagnosis. [3] Ultrasonography is an initial test of choice due to its availability and portability. [6, 7] However, CT scan is more sensitive and specific, and is the diagnostic modality of choice. [7] Management is generally conservative as most of the time this is self-limiting condition. Reversal of coagulopathy is the most important aspect of management. Blood transfusion may be considered in case of fall in hemoglobin. Spontaneous resolution, especially in large hematomas, may take up to several months. Therapeutic pulsed ultrasound may be used for hastening the resolution. [9] Need for anticoagulation should be weighed against the risk of re-bleeding once the patient is stabilized. Invasive procedures or surgery are rarely needed for securing haemostasis. Coil or gel foam embolization (of the epigastric arteries) can be successfully used in patients who are refractory to bleeding despite reversal of coagulopathy. [8] Surgical management is associated with significant morbidity due to the advanced age and multiple co-morbidities in these patients. When diagnosed early, prognosis is usually good and complete resolution is the rule. However, there is a relative lack of awareness about abdominal wall conditions presenting as acute abdomen. This often leads to delay in the diagnosis, increased morbidity and occasionally mortality in case of Rectus Sheath Hematoma.

CONCLUSION:
Rectus sheath hematoma is rare and it present as an acute abdominal emergencies. In absence of predisposing factors high clinical suspicion is required to reach diagnosis. Fall in hemoglobin and deranged coagulation profile help in diagnosis. Ultrasonography is the initial test, but CT scan is the investigation of choice. Early diagnosis of rectus sheath hematoma can improve the outcome of the patients and can prevent catastrophic events. Conservative management is the mainstay as seen in this case also. Invasive procedures such as embolisation and surgery are associated with morbidity and rarely required.

References