



Case Report

Could Spontaneous Retroperitoneal Haematoma Present with Scrotal Mass?

Mini-review and a case report

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ABSTRACT

Background: Retroperitoneal haematoma could be caused by different factors. It is increasing due to an increase in the use of antithrombotic and anticoagulant therapy. Diagnosis of retroperitoneal haematoma forms a big challenge in daily clinical practice. Patients with retroperitoneal haematoma could present with leg paresis, abdominal pain, shock or abdominal compartment syndrome. Retroperitoneal haematoma could be treated conservatively but surgical interference or embolization of the bleeding vessels is always an option. **Objectives:** To present a case with spontaneous retroperitoneal haematoma presenting with scrotal haematoma together with a mini- review of retroperitoneal haematoma. **Conclusions:** Retroperitoneal haematoma may present with a scrotal swelling and could be treated conservatively depending on the presentation and severity of the bleeding.

INTRODUCTION

Retroperitoneal bleeding or haematoma is not an uncommon surgical problem. The diagnosis of retroperitoneal haematoma is a big clinical challenge. In general, retroperitoneal bleeding could be caused by various factors including trauma, tumours, vascular anomalies, bleeding disorders, antithrombotic and anticoagulant therapy, idiopathic and some times iatrogenic as a complication of coronary angioplasty or femoral catheterization. Rarely patients with warfarin or heparin therapy present with retroperitoneal haematoma.

Due to nearly closed retroperitoneal compartment the physical findings may be rare or sometimes misleading during presentation of patients with retroperitoneal haematoma. Physical findings vary from leg paresis (femoral or sciatic neuropathy) to abdominal pain and shock [1]. They may present as abdominal compartment syndrome or as an acute abdomen [2]. Consent has been obtained from the patient for taking pictures and reporting his condition.

AIMS

To present a case with spontaneous retroperitoneal haematoma presenting with scrotal haematoma of unknown cause in an otherwise healthy patient together with a mini-review of currently available published literature on retroperitoneal haematoma.

CASE REPORT

A hardworking 51-year-old man was referred to our department with acute painful left side scrotal swelling of 10 days duration.

The condition had started 6 days earlier as sudden onset of mild epigastric pain, radiating to the left scrotum, associated with nausea and fever (temperature 38-39 C°). He lost 28 kg in the last 18 months which was self-induced. He is a hardworking man with no history of trauma, dysurea or gross haematuria as well as any change in his dietary or bowel habits.

The patient had a history of sigmoid resection because of diverticulitis with perforation twenty years ago. He took no regular medication.

Physical Examination:

Good general condition, normal vital signs and normal general and systemic physical examination (including head and neck, chest, abdomen, upper and lower extremities and back).



Figure 1: Left scrotal swelling due to haematoma secondary to retroperitoneal bleeding drained through inguinal canal into the scrotum.

Local examination: Scrotum was red, swollen and tender on the left side and the swelling was extending from abdomen, translumination was negative, normal testicles on both sides.

Investigations:

* Laboratory investigations were normal apart from haemoglobin progressively decreasing 115 to 78, platelet 567, leukocyte count 17.8, K 4.7, C- reactive protein 287, Creatinine 369 and liver test: ALP 2.2, ASAT 1.61, ALAT 1.47, GT 2.89. Other blood tests including "Serum amylase, serum calcium and clotting profile" were within normal limits.

* Ultrasound examination of the scrotum showed scrotal haematoma connected to the abdomen.

* CT scan of the abdomen was normal apart from a large retroperitoneal haematoma mainly in the left flank, and some fluid collection intraperitoneally around the pancreas, spleen and stomach. Haematoma was extending from diaphragm to the left scrotum.

* CT scan of the chest: nothing significant apart from little pleural effusion in the left side.

* Oesophagogastroscopy showed only hiatus hernia.

* Selective angiography showed no AV malformation or active bleeding

The patient was treated symptomatically, he responded dramatically and was discharged in a good general condition although the blood pressure was raised during his stay in the hospital to 160/100 which was treated and planned for follow-up within the District Health Centre.

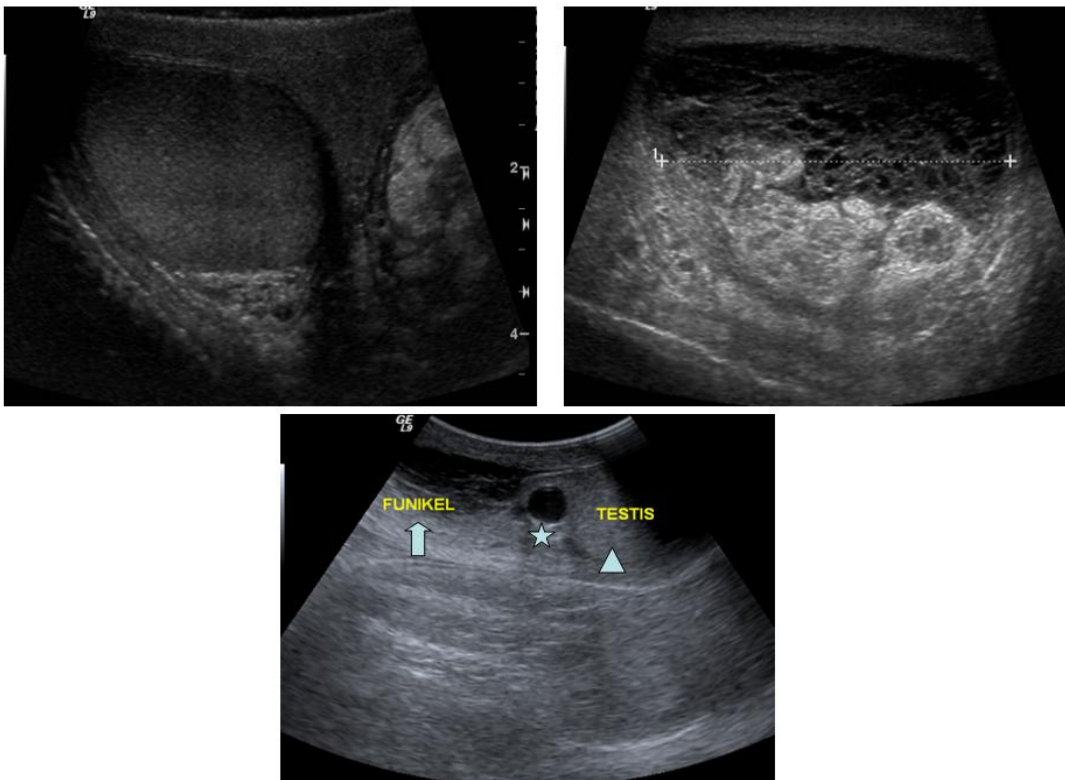


Figure 2: Ultrasound of the scrotum showing the haematoma in the left side of scrotum. Arrow indicates spermatic cord. Star indicates a cyst. Arrow head indicates left testicle.

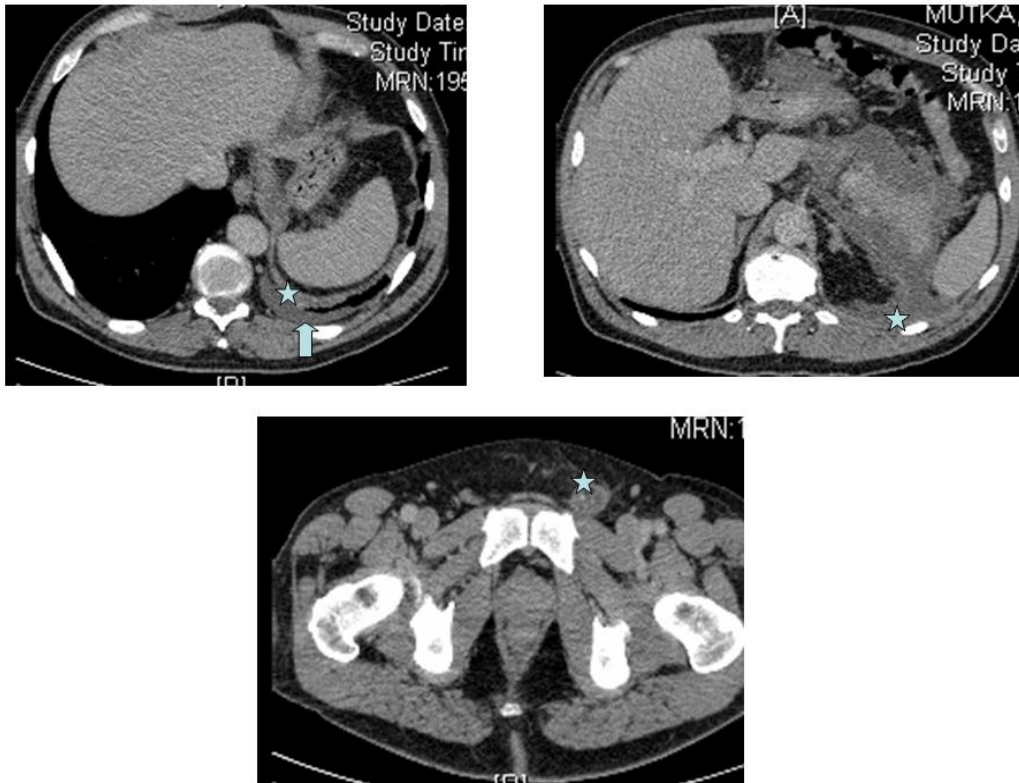


Figure 3: CT scan of abdomen showing left side retroperitoneal haematoma and left side pleural effusion. Arrow indicates pleural effusion. Star indicates retroperitoneal haematoma which extending in the inguinal region in the lower figure.

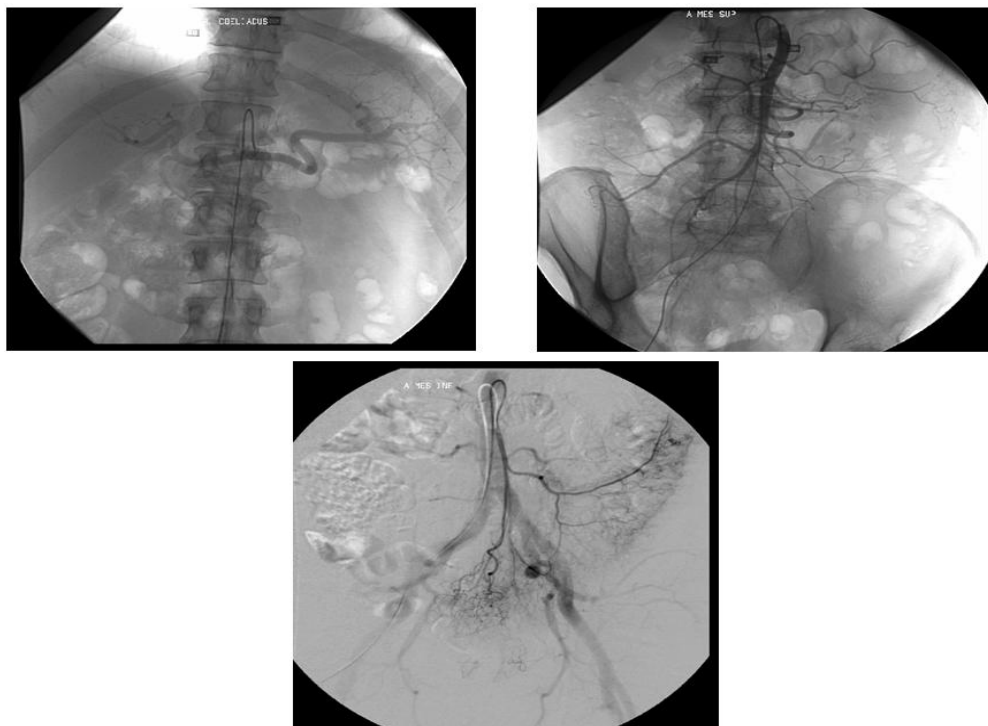


Figure 4: Selective angiography showing celiac trunk, superior and inferior mesenteric arteries with no active bleeding.

DISCUSSION

Because of the increasing incidence of antithrombotic and anticoagulant therapy the prevalence of retroperitoneal haematoma is increasing. However, retroperitoneal haematoma could happen in healthy individuals after trauma [3] and in patients with blood disorders e.g. haemophilia [4].

Unfortunately the incidence of retroperitoneal haematoma is still unknown. Presentation of retroperitoneal haematoma may vary from abdominal pain, shock, peritonitis [2], meteorism and femoral nerve palsy [5]. Nerve palsy is due to compression by the haematoma. Any of these findings with history of trauma or history of anticoagulation or blood disorders should raise the possibility of retroperitoneal bleeding and should be investigated precisely and urgently. However, retroperitoneal haematoma in an otherwise healthy individual is a diagnostic challenge in our daily clinical practice.

Investigation of these patients should be directed towards the plausible causes behind bleeding which have been mentioned early in this study.

Retroperitoneal space forms a potential space due to loose attachments of peritoneum to the extra peritoneal structures in the posterior abdominal wall below the diaphragm [6]. So a patient with retroperitoneal bleeding could lose a huge amount of blood and the patient could present in a shock state.

Although an indirect inguinal hernia has been reported 5 months after trauma [7], to our knowledge no case has been reported regarding upper abdominal pain with scrotal haematoma in an otherwise healthy young individual with no history of trauma or blood disease.

As we know, retroperitoneal haematoma may present with meteorism or silent abdomen but they may also present with peritonitis or acute abdomen [2].

Controversies exist regarding treatment of retroperitoneal haematoma, whether to treat

them conservatively or urgent operations should be performed to stop the bleeding or through nerve decompression. The decision should be made according to the presentation of these patients, whether in shock or with nerve compression, which demands urgent interference and control of bleeding and/or surgical decompression of the haematoma to release the pressure.

CONCLUSIONS

Retroperitoneal haematoma:

1. Could happen spontaneously.
2. May present with a scrotal swelling.
3. Conservative treatment is always an option.

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