

# Intra-abdominal haematoma

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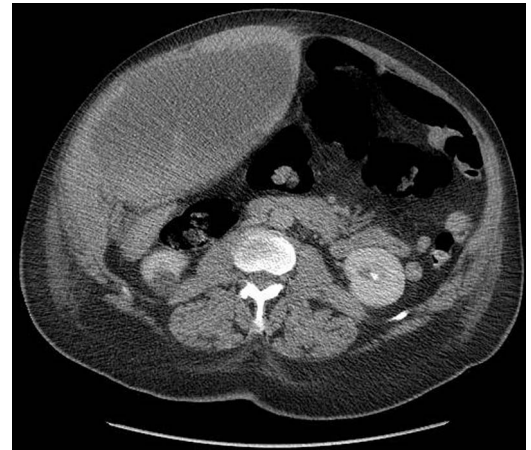
## DESCRIPTION

A previously healthy 65-year-old man was admitted to the hospital for shortness of breath and bilateral leg swelling. Electrocardiography revealed atrial fibrillation and the patient was started on warfarin along with enoxaparin.

Five days later, the patient began to develop right upper quadrant abdominal pain in the same region where he was receiving 70 mg subcutaneous enoxaparin twice a day. The pain progressively worsened and the patient underwent an ultrasound with subsequent abdominal CT, which showed a large 22×11×20 cm mixed solid and fluid density mass in the right anterior abdominal wall (figures 1 and 2).

Conservative measures failed, and the patient was transferred to the intensive care unit for hypotension, a rapid decline in haemoglobin and a sudden increase in international normalised ratio to 3.8. After haemostasis was established, the patient underwent incision and drainage of the abdominal wall haematoma. A 1.3 litre firm blood clot was found to be dissecting the rectus abdominis muscle, which was successfully evacuated.

Rectus sheath haematoma is an uncommon, but potentially life-threatening consequence of enoxaparin administration.<sup>1</sup> In the elderly and in those



**Figure 2** Mixed solid and fluid mass on the cross-sectional view.

who are thin, the deltoid region may be a safer region for injection of low-molecular-weight heparins to reduce the risk of life-threatening haematoma.<sup>2 3</sup>



**Figure 1** Large mixed solid and fluid mass in the anterior abdominal wall.

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## Learning points

- ▶ Rectus sheath haematoma is a life-threatening medical condition that uncommonly occurs as a complication of anticoagulation therapy.
- ▶ Elderly and lean individuals may be at an increased risk.
- ▶ In these individuals the deltoid region may be a safer region for enoxaparin administration.

**Competing interests** None.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

## REFERENCES

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