**CASE REPORT**

Lesson learnt: don’t prescribe heparin for hemoperitoneum!

D Debnath

This paper describes a case of spontaneous rupture of the spleen that was misdiagnosed as pulmonary embolism. Because of a lack of history of trauma, rarity of occurrence, and confusing clinical presentations, an unwary clinician may fail to diagnose this condition in time. It may result in erroneous treatment of a condition, which is potentially curable.

Although he was heparinised initially, heparin was not thought to be the cause of splenic rupture (as the patient already had symptoms before treatment with heparin). However, addition of an anticoagulant might have compounded the situation!

In retrospect, he categorically denied any history of trauma in the preceding 12 months. He remained well on regular follow ups and was subsequently discharged from the clinic after one year.

**DISCUSSION**

It is recognised in the literature that presentation of spontaneous rupture of spleen can be deceptive and may present as pulmonary embolism. The other conditions that may be mimicked are perforated peptic ulcer, angina pectoris, myocardial infarction, ectopic pregnancy, acute appendicitis, and acute sigmoid diverticulitis.

Acute abdomen had quite aptly been described as “a trap for the unwary”. Despite a careful approach, there would remain some situations where clinical features would be non-specific in nature and base line investigations would fail to provide any diagnostic information. However, a high index of suspicion and repeated clinical examinations would be helpful to assess such a situation. If the patient failed to make any satisfactory progress and the condition still remained unclear, it would be worth performing special investigations at an early stage. In this case an ultrasound scan of the abdomen would have clinched the diagnosis preoperatively. Ultrasonography of the abdomen should be the investigation of choice in similar circumstances, particularly in the absence of any associated feature of deep venous thrombosis of legs to suggest a possible source of pulmonary embolism.

Spontaneous rupture of spleen was first described by Atkinson in 1874. However, its existence had always been doubted. The condition can be fatal, unless diagnosed, and treated promptly. Absence of any history of trauma makes the diagnosis very difficult and causes delay in treatment.

Orloff and Peskin performed an extensive review in 1958 and specified four criteria that must be met before a rupture of spleen could be called spontaneous. The criteria are (1) no history of trauma or unusual effort; (2) no evidence of any disease that may affect the spleen adversely; (3) no evidence of peri-splenic adhesions or scarring of the spleen to suggest trauma or rupture; and (4) the spleen should be normal on macroscopical and histological examination. The present case fulfils all these criteria.

It is now well recognised in the literature that spontaneous rupture of spleen does occur, although the actual mechanism remains uncertain. It is suggested that greater awareness and familiarity with this uncommon condition would increase early diagnosis, resulting in prompt surgical intervention and improved survival.
ACKNOWLEDGEMENT
The work originated at West Cumberland Hospital, Whitehaven, Cumbria, CA28 8GJ. I am grateful to Mr S M A El-Rabaa, Consultant Surgeon, West Cumberland Hospital, for his guidance and permission to report the case.

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doi: 10.1136/emj.20.2.206

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