Reviewer’s report

Title: Acute abdomen due to spontaneous splenic rupture in association with the first presentation of lung malignancy: a case report.

Version: 2 Date: 21 March 2011

Reviewer: nathan pennell

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

This is a case report of a patient who presents with an acute abdomen and is found to have a spontaneous splenic rupture (SSR) requiring emergency surgery. On imaging the patient is also found to have what appears to be at least locally advanced adenocarcinoma of the lung. The authors report that this is the first documented association between lung cancer and SSR in the absence of metastasis to the spleen or treatment effect from chemotherapy or growth factor administration. This does appear to be a novel and previously unreported association, and is interesting and worthy of reporting.

Overall this is very well written and has a good amount of detail. There is a very nice summary of SSR as well as pathologic rupture of the spleen, and figure 1 is very useful. The radiology images appear to be appropriate.
There are a few details that I think would be necessary to complete the report. No mention is made of smoking or exposure (asbestos, etc) history in the patient, known risk factors for lung cancer, nor is there mention of family history of cancer, hematologic, or clotting disorders. The authors do not specifically document that there was no precipitating trauma to the patient in the recent past, this needs to be present for the definition of SSR. It would be nice to know the final stage of the patient if this is known i.e. stage III versus IV.

The authors also mention that there was no hint of suspicion for viral illness, but she felt unwell for 3 days prior to the presentation and was hypoxic with inspiratory crackles, which could denote an infectious illness. Please clarify the presentation to exclude viral illness if possible. Was HIV or EBV testing performed on the patient?

Finally, there are no details of the spleen pathology other than "no malignancy". A standard splenectomy pathology review might not exclude low grade hematologic malignancies such as CLL. Was any specific testing done to exclude hematologic malignancy? If not please at least mention if the pathology report specifically did not note any signs of hematologic malignancy, and that no abnormal lymphocytes were noted on the blood smear.

**Quality of written English:** Acceptable

**Declaration of competing interests:**

I declare I have no competing interests.