Reviewer's report

Title: Spontaneous idiopathic pneumoperitoneum presented as acute abdomen: a case report

Version: 1 Date: 2 September 2010

Reviewer: Taimur Saleem

Which of the following best describes what type of case report this is?: New associations or variations in disease processes

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?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

Thank you for giving me the opportunity to review this case report. The authors have described an interesting and rare case whereby extensive work-up failed to identify a cause of the pneumoperitonneum.

The case is well presented and scientifically accurate. However, language corrections are needed at several places throughout the manuscripts. I have pointed out many of these in my detailed comments below. This case should be published after making the following revisions to the manuscript.

Title - Spontaneous idiopathic pneumoperitoneum presented as acute abdomen: a case report. "Presented" should be written as "presenting"
Abstract - Case presentation: It is mentioned that the patient had acute abdominal pain but no findings of physical examination have been mentioned. Did she have guarding, rebound, tenderness in any specific quadrant or diffusely? Please mention significant negatives or positives from the history. It would be appropriate since the authors themselves mention this point in the conclusion: "A thorough history and physical examination together with laboratory tests and radiologic techniques are useful tools to identify patients with non-surgical PP avoiding thus unnecessary operations". An abstract should be self explanatory and should stand as an independent summary of the manuscript. Therefore, I would advise expanding it a bit to incorporate important details from the case.

Introduction - "Pneumoperitoneum can also be the result of a diverticulum rupture or of an abdominal trauma". Revise this sentence with following changes: "diverticular rupture or of abdominal trauma"

"It is commonly presented with signs and symptoms of peritonitis" - revise to write: "it commonly presents with signs and symptoms of peritonitis"

“spontaneous, SP” - remove comma after spontaneous

I would suggest moving the different types of spontaneous SP to the discussion section rather than explaining in the introduction. It may cause reader to lose focus on idiopathic spontaneous SP which this case is actually about.

Case presentation:

"A 69-year-old female patient was presented at our emergency department (ED) with acute onset of abdominal pain and vomiting, which had started two hours before". Please rephrase. write "was presented" as "presented". Write "with acute onset of abdominal pain and vomiting which had started two hours before" as with a two hour history of abdominal pain and vomiting.

"Her past medical history was unremarkable except for previous cholecystectomy and appendectomy many years before". rephrase to remove the words many years before.

"at deep palpation" should be rewritten as on deep palpatation

"polymorhonuclear leucocytosis" - the spellings of polymorphonuclear need correction

Discussion

"The etiology of PP and the clinical signs determine its treatment, surgical or not". rephrase as "the etiology of PP and the clinical signs determine its mode of treatment".

"avoiding thus unnecessary laparotomies" - rewrite as thus avoiding unnecessary laparotomies

"but abdominal CT is a more sensitive method for diagnosing PP and indentifying
the cause of “acute abdomen”. please correct the spellings of the word identifying
"It has been proposed that in some cases with idiopathic PP, a subclinical small
visceral perforation should occur permitting only the leakage of air and not of
bowel contents" - should occur should be replaced with may have occurred

Why wasn't laparoscopic exploration attempted in this patient for initial evaluation
instead of proceeding directly to an open laparotomy, especially if the patient had
no prior significant history?

What is the usual non-diagnostic rate of laparotomy for spontaneous
pneumoperitoneum. This is clinically useful information for readers I think.

Conclusion

Please rephrase the following lines to make it clearer and add punctuations as
necessary, "A thorough history and physical examination together with laboratory
tests and radiologic techniques, classic and/or modern, are useful tools to identify
patients with non-surgical PP avoiding thus unnecessary operations".

**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare that I have no competing interests.