Reviewer's report

Title: Micro-histology of pancreatic masses submitted to endoscopic ultrasound-guided fine-needle aspiration in the suspicion of metastatic disease.

Version: 2 Date: 29 November 2012

Reviewer: jonathan evans

Reviewer's report:

General Comments

The paper aims to describe the accuracy of endoscopic ultrasound fine needle aspiration (EUS-FNA) in the diagnosis of pancreatic metastases. Although not explicitly stated in the abstract or title I assume that this was a retrospective database analysis and therefore historical inaccuracies and biases are unavoidable. The authors have selected patients from their database based on the presence of a pancreatic mass on CT and a previous medical history of malignancy. As they demonstrate, two of their patients were found to have pancreatic metastases from previously unknown primary cancers. This raises the question about whether the selection criteria has included all pancreas metastases patients in their database; it is possible that other patients with an unknown primary cancer may have undergone EUS-FNA for a pancreas mass seen on CT and may have a non-diagnostic histology sample. These patients would not be included in this selection criteria and therefore will not appear as false negative cases.

The authors describe the appearances of pancreatic metastases compared to primary pancreatic malignancies and they also include the interval between the primary cancer diagnosis and the appearance of the pancreatic metastasis, and the interval between pancreatic metastases diagnosis and death. This information does improve the impact of the paper.

The quality of the English grammar does need some improvement but this is a minor point.

Key: Major Revision [MA]
Minor Revision [MI]
Discretionary Revision [DR]

Specific Points

Throughout the article the authors use the word ‘micro-histology’. I note that they use a fine needle aspiration technique which produces cores of tissue which is then preserved in formalin. I do not see the need for the addition of the prefix “micro” as by definition histology is microscopic for such specimens. [MI]

The authors may want to consider changing the title so it incorporates the accuracy of the procedure which is the whole purpose of performing the EUS
FNA. As an example “Accuracy of endoscopic ultrasound guided fine needle aspiration in the suspicion of pancreatic metastases”. [DR]

Abstract

In the methods paragraph there should be some mention to say that this is a retrospective study. In the third line of the methods paragraph the word micro-histology should be replaced by EUS-FNA as it is the performance of the EUS-FNA that is being assessed rather than the histology. [MI]

In the results section (first line) rather than “37 patients were selected” please change to “37 patients underwent EUS-FNA for probable pancreas metastases”. [MI]

In the results section of the abstract:
- First line: the word “with” should be inserted between presented and symptoms. [MI]
- In the conclusion paragraph (second line) change “definitive diagnosis of pancreatic disease” to “definitive diagnosis of metastatic disease”. [MI]

Key Words

Remove the word neoplasm from “neoplasm metastasis”. [MI]

Background

- First paragraph, line 5: The letter “a” should be included before the word “situation”. [MI]
- First paragraph, line 6: Change the word “with” to the word “of”. [MI]
- Paragraph 3, line 2: Change “the micro-histology obtained by EUS-FNA” to “EUS-FNA”. [MI]

Methods

- Paragraph 1, line 6: The authors have stated that all patients had radiological evidence of a pancreatic mass and yet in the results section at least one patient had only evidence of enlargement of the pancreatic head associated with jaundice. I assume a discrete mass was not seen in this particular patient? [MI]

- Paragraph 2, line 1: The authors have stated that they excluded patients who had no definitive diagnosis of pancreatic neoplasia on pathology examination. I presume they are referring to the pathology obtained at the time of surgery and not the EUS FNA samples? [MI]

- Paragraph 2, line 1: The first line should be changed to “once informed consent was obtained for the
procedure”. [MI]

• Paragraph 1, line 19:
Change the sentence to “the specimens were sent to a pathologist”. [MI]

Statistical Analysis

• Paragraph 1:
The authors state that both the radiologist and echoendoscopist were blinded to
the history of previous cancer. In a retrospective data analysis I find it difficult to
believe that the radiologist and endoscopist were blinded to the background
history of the patient. Can the authors confirm that this was the case? [MI]

• Paragraph 1, line 4:
Change “blinded about the history” to “blinded to the history”. [MI]

Results

• Paragraph 1:
The authors state that 52 patients were recruited but failed to explain on what
basis they were recruited. They then state that after applying exclusion criteria for
suspicious lesions for pancreatic metastases only 37 patients were selected. Can
they explain what the ‘exclusion criteria’ were, or do they mean ‘inclusion criteria’
were the presence of a pancreatic mass on CT and a past history of malignancy? [MA]

• Paragraph 1, line 1:
Please change “were recruited” to “were identified”. [MI]

• Paragraph 1, line 4/5:
I presume the authors mean an increase in size of the pancreatic head when
they say “a non-specific increase of the gland with jaundice”? [MI]

• Paragraph 1, line 5:
Instead of “in other two” it should read “in another two”. [MI]

EUS Evaluation

• Paragraph 1, line 7:
The percentage “5,4%” should be changed to “5.4%”. [MI]

• Paragraph 2, line 8:
Change the word “other” to “the remaining”. [MI]

Clinical Impact of EUS-FNA

• Paragraph 1, line 4:
Insert the words “in the size” after the word “increase”. [MI]
• Paragraph 1, line 5:
Add the word “patient” after the word “first”. [MI]

• Paragraph 1, line 6:
Change the word “one” to the word “patient”. [MI]

• Paragraph 1, line 7:
Change the word “ago” to the word “previously”. [MI]

• Paragraph 1, line 8:
Change “had a surgery” to “had undergone surgery”. [MI]

• Paragraph 1, line 9:
Change the word “ago” to “earlier”. [MI]

• Paragraph 1, line 10/11:
Change the sentence “The patient with jaundice and normal CT” to “In the patient presenting with jaundice and a normal CT”. [MI]

• Paragraph 1, line 13:
Change the sentence “Finally the patient whose CT” to “In the patient whose CT”. [MI]

• Paragraph 1, line 16:
Change the sentence “A case of clear cell cancer had been operated for a renal tumour 30 years ago” to “One patient with a pancreatic mass had had a nephrectomy for a renal cell tumour 30 years earlier”. [MI]

Long-term Follow-up after EUS-FNA

In the first paragraph the authors state that all patients were followed-up until death and yet some of the patients remain alive at the time of reporting their data. This should be corrected. [MI]

• Paragraph 1, line 5/6:
The sentence “there was no significant difference in the median survival for patients submitted or not to surgery” should be changed to “there was no significant difference in the median survival between patients who received surgery and those who did not”. [MI]

Discussion

• Paragraph 1, line 1:
Remove the words “constituted of”. [MI]

• Paragraph 1, line 2:
Change the words “as well as” to “or represent”. [MI]
• Paragraph 1, line 6:
Change the words “an site” to “a site”. [MI]

• Paragraph 2, line 1:
Change the first line to “Patients presenting with pancreatic metastases often have non-specific symptoms”. [MI]

• Paragraph 2, line 2:
Add the word “with” before “abdominal pain”. [MI]

• Paragraph 2, line 3:
Change the words “frequent symptoms for our cases” to “frequent symptoms in our patients”. [MI]

• Paragraph 2, lines 4-8:
The final 2 sentences are clumsy and should be rewritten. [MI]

• Paragraph 3:
First six lines: Grammar is poor and this should be rewritten. [MI]

• Paragraph 4, line 6-7:
Change the words “which can even contraindicate surgical procedures for non-neoplastic tumours” to “which can avoid unnecessary surgery for non-neoplastic tumours”. [MI]

• Paragraph 5, line 6-7:
Change “5 of them discovered by EUS after identification of a mass by CT” to “5 of them confirmed by EUS after identification of a mass on CT”. [MI]

• Paragraph 6:
The authors state that, unlike other studies, they are able to assess the accuracy of EUS FNA for pancreatic metastases more accurately than in previous studies that only looked at cases after a positive diagnosis of pancreatic metastases have been made. While this is true they have not included possible missed pancreatic metastases in patients who were not included in the study. Please refer to the opening paragraph of this review. [MA]

• Paragraph 7, line 11:
Change the word “cause” to “because”. [MI]

• Paragraph 7, line 16:
The authors have stated that they feel cytopathological evaluation in other studies is ‘not short’. They do not know this for a fact and this sentence should be changed. [MI]

• Paragraph 8:
The authors give no new information in this paragraph and add no more discussion to the facts already presented in the results section. I would therefore remove the whole of paragraph 8 beginning “In this series, the mean ………”. [MI]

Conclusions:

• Paragraph 1, line 1:
The sentence should be changed to “This study demonstrates that PM should be considered in the presence of a solid pancreatic lesion in patients with a history of a previous extrapancreatic cancer, regardless of the time elapsed from the occurrence of the primary cancer.” [MI]

The tables and figures attached to the paper appear satisfactory.

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

No competing interests