Reviewer's report

Title: Case report: PET/CT, a cautionary tale.

Version: 2 Date: 14 May 2007

Reviewer: Chaitanya Divgi

Reviewer's report:

General
Very interesting case report.
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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
The authors' contention that "... the potential for PET/CT to mislocalise lesions is not well appreciated by clinicians ... in part because the PET/CT reports do not currently contain any disclaimer regarding this problem", is rather exaggerated and not entirely supported by the data they present. It is becoming practice to attach disclaimers only when necessary and not routinely, as is implied in the quote above. (A disclaimer ought to have been inserted in the PET/CT report in this case, since the PET alone suggests the lesion is pre-vertebral.) Please add qualifiers to the contention.
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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
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Discretionary Revisions (which the author can choose to ignore)
Generally, "PETologists" (I thank the authors for this term) look at the PET and the CT separately as well as co-registered (as in Fig 1 E&F); the PET component (Fig. 1H, a poor reproduction) presumably did not appear comparable to the prior PET (Fig. 1 A&B); more comparative images would help make the authors' case.
Finally: was any attempt made to co-register the PET alone with the PET component of the PET/CT?

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.