Author's response to reviews

Title: Giant cell arteritis exclusively detected by 18F-fluorodeoxyglucose positron emission tomography: a case report

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Author's response to reviews: see over
RE: Manuscript ID 2130907860128149

Dear Dr. Kidd,

Thank you very much for the interest in our work and giving us the opportunity to revise our manuscript entitled ‘Giant cell arteritis exclusively detected by $^{18}$F-fluorodeoxyglucose positron emission tomography: a case report’.

We feel that we have fully addressed the reviewers remarks as well as the editorial requests in the revised manuscript. Additionally, please find attached the list of changes made.

We are looking forward to hearing from you.

Sincerely,

Markus Brückner, MD
For the authors
Rebuttal

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Reviewer 1: Ami Schattner

Comment #1
The name is wrong. GCA is not "camouflaged" by FUO. FUO is one of its well known presentations. An alternative title can be : GCA detected by FDP PET imaging.
Answer
The title of the manuscript was changed accordingly to this important comment.

Comment #2
2. Intro
Additionally, systemic symptoms including fever, fatigue and weight loss can be found...in up to 50%...In 15% fever exceeds 39 (cite CALAMIA KT A&R 1981) and can be the single PS etc...
Answer
We appreciate this valuable comment. The sentence was changed accordingly and the citation was added to the references (page 3, lines 71-75).

Comment #3
Change 'affection' to involvement.
Answer
This sentence was deleted in the revised manuscript.

Comment #4
They report GCA not PMR!!!!!!
Answer
This term was deleted all over the text.

Comment #5
3. Case
Delete all reference to the 2007 CAP and the CT (fig.1) is unnecessary.
Answer
All information concerning the 2007 pneumonia including the CT were deleted in the revised manuscript.

Comment #6
Add CBC+diff, albumin, globulin, LED.....
Answer
All parameters available from initial blood tests were added to the text (page 4, lines 99-104).

Comment #7
Stop after ’were negative’ after the micro-org. listed.
Answer
We deleted the rest of the sentence accordingly.

Comment #8
Describe duration of follow up, ADR of 90 mg pred? (average daily rate?).
Answer
The clinical course and follow-up after initial steroid therapy was described in the end of the case presentation (page 5, lines 128-133).

Comment #9
4. Disc
Cite BLEEKER-ROVERS CP Medicine 2007 to highlight that FUO is a well-known PS of GCA and many (my department included) perform a routine TA biopsy in all FUP Pts. with negative workup.
Answer
The point of the crucial role of temporal artery biopsy after negative workup in FUO-Patients was added to discussion and the reference was cited (page 6/7, lines 156-158).

Comment #10
Cite SCHATTNER A J Gen Intern Med 2012 to show that "silent" intra-thoracic manifestations such as effusions may the PS of GCA.
Answer
These above-mentioned presenting symptoms and the reference were also added to the discussion (page 7, lines 162-164).

Comment #11
Rewrite accordingly and do not keep saying PMR...This is NOT the diagnosis.
Answer
We agree with the reviewer. Accordingly, PMR was deleted in the revised version of the manuscript.

Reviewer 2: Ivan Padjen

Comment #1
The authors should mention that giant cell arteritis represents 17% of cases of fever of unknown origin among patients above 50 years of age (References: Vanders
We appreciate this helpful comment. This important information and the references were added to the introduction (page 3, lines 72-74).

Comment #2
They should also discuss the reasons for and against a temporal artery biopsy in the presented clinical setting, prior to performing positron emission tomography (with or without CT).

Answer
Lortant reasons for and against biopsy are now discussed as follows (page 7, lines 158-162): “Biopsy is still recommended as gold standard as sophisticated procedure in local anaesthesia with low complication rates, on the other hand only 50% of biopsy samples show multinucleated giant cells with even 10-25% false negative result”.

Comment #3
Atherosclerosis should be mentioned as the most important differential diagnostic feature of increased tracer uptake in the blood vessels, given that it is the most frequent inflammatory disease of the arteries, although not a part of the vasculitides spectrum.

The role of combining PET and computed tomography (PET/CT) should also be addressed, since the combined method has superior spatial resolution compared to PET alone.

Answer
The above-mentioned facts concerning atherosclerosis and a new passage discussing the role of PET and computed tomography was added in the discussion (page 7, lines 176-179): “However, there are several limitations of $^{18}$F-FDG PET, which cannot reliably be used to diagnose or monitor inflammation of the temporal artery due to the limited spatial resolution of PET alone; the combination of PET and computed tomography (PET/CT) generally has superior spatial resolution.”

Comment #4
In the Discussion the authors state that inflammation of the aortic arch and subclavian arteries could only be visualized by $^{18}$F-FDG PET. Please note that other nuclear methods are also available for this purpose, such as gadolinium scanning. However, the latter is less sensitive and specific in the detection of vascular wall inflammation, when compared with FDG PET.

Answer
We agree with the reviewer. The comparison with gadolinium scanning was added to the discussion (page 7, lines 174-176).