Reviewer’s report

Title: Magnetic resonance imaging, computed tomography, and 68Ga-DOTATOC positron emission tomography for imaging skull base meningiomas with infracranial extension treated with stereotactic radiotherapy - a case series

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Reviewer: Stefanie Milker-Zabel

Reviewer’s report:

Aim of the present retrospective study was to compare three diagnostic methods MRI, CT and 68Ga-DOTATOC PET, in patients with skull base meningiomas.

The analysis based on 16 out of 50 patients with infracarinal extension of a skull base meningioma, visible in MRI/ CT or PET. Histopathologically, 7 patients had a WHO grade I meningioma and in 9 patients the clinical and radiological characteristics of the tumor were consistent with the clinical diagnosis of meningioma.

DOTATOC PET improves target definition in addition to MRI/CT imaging. Although the technique using DOTATOC PET has previously been described in 2001 by Henze et al. One of the first studies regarding improvement of target volume delination in meningiomas was published by Milker-Zabel et al. in 2006.

Their findings regarding infracranial extension are very impressive and the paper is well written. Their results also suggested the potential possibility of improvement of the tumor control for infracranial meningioma. What would have been more interesting is if they showed that the outcomes improved-whether in control or in side effect profile, since that is really the ultimate test of the effectiveness of new technology.

Nonetheless, it is a further interesting study in that they were able to show that perhaps we need to consider other methods in this setting to define our volumes.

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:

None