

Comments on Fuster et al.: Prospective comparison of whole-body ^{18}F -FDG PET/CT and MRI of the spine in the diagnosis of haematogenous spondylodiscitis

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Dear Sir,

I am very surprised by the conclusion of a recent study of the value of MR and PET for the diagnosis of spondylitis, that is that FDG PET should be considered as a first-line imaging procedure due to its higher specificity than MR imaging [1].

I understand that these results show an “unusually” low specificity for MRI. After reading the details of these results, I observed that this low specificity was due to the high rate of false-positive MR results. These false-positive results were observed only in patients with vertebral fracture or in the presence of spondyloarthropathy. So I wonder how the authors can observe the MR criteria, detailed in the “Materials and methods” section, “involvement of the intervertebral disc, disc space narrowing diagnosis, epidural extension and a contrast enhancement pattern” in such cases? These findings suggestive of disc infections, are quite unusual in such cases, particularly in vertebral fracture. However, a well-known complication in patients with ankylosing spondylitis is the development of discovertebral lesions (Andersson lesions) that result from inflammation or fractures of the completely ankylosed spine [2]. Andersson lesions can exhibit inflammatory discovertebral changes with bone marrow oedema [2, 3]. In this setting, MRI has been proven to be useful in the differential diagnosis in relation to infectious spondylodiscitis. Despite pronounced discovertebral destruction, there is no widespread bone marrow oedema and the paravertebral tissues are not affected [2, 3, 5].

MRI is considered the modality of choice for the imaging diagnosis of spondylodiscitis, with a reported sensitivity higher than 90 % and a satisfactory specificity [4, 5]. Its advantage over other modalities, including FDG PET/CT, relies on its superior ability to provide anatomical information, particularly relating to the epidural space and spinal cord.

The authors conclude that “due to its high specificity, ^{18}F -FDG PET/CT should be considered as a first-line imaging procedure in the diagnosis of spondylodiscitis”. This implies far-reaching consequences and could change clinical practice, so I would be interested to hear their response to my comments.

References

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