Reviewer's report

Title: Value of SPECT-CT Imaging for Middle-Aged Patients with Chronic Anterior Knee Pain

Version: 3 Date: 20 January 2015

Reviewer: Klaus Strobel

Reviewer's report:

general considerations:
the literature regarding the impact of SPECT/CT in knee pain is very limited and this paper addresses the interesting topic of prognostic value of SPECT/CT findings of the femoropatellar joint. The authors show retrospective data with clinical follow-up and arthroscopic correlation in a relevant number of patients.

major compulsory Revisions:
Abstract
Methods:
1.1 instead of the results were graded: the scintigraphic uptake was graded into grade 0-3
1.2 explain what is meant by degree
Results:
1.3 showed significantly higher scintigraphic uptake
1.4 give numbers for good and fair agreement.
Methods
1.5 the authors mentioned informed consent. Do they have ethics committee approval?
Evaluation of the SPECT/CT
1.6 give the average and range of injected radionuclid dose
1.7 the recommended activity, at least in Europe is about 500 MBQ. Why such a high dose of 1,110 MBq
1.8 what does the numbers (1), (2) mean in the line where the authors describe the uptake criteria? They do not refer to references and I think can be deleted
1.9. you give a interobserver reliability of 0.79. Does this mean patella or trochlea or both. Please clarify
Management of the study patients
1.10 please reference the ICRS evaluation system
Results
1.11 did you find also other reasons for knee pain in the arthroscopy? Please mention other findings beside cartilage lesions

1.12 MRI serves as imaging reference standard in most institutions regarding knee pain. Would be very interesting to compare bone marrow edema and cartilage lesions in MR with scintigraphic uptake in SPECT/CT. Did your patients have MR images?

Figures

1.13 an example with SPECT/CT and arthroscopic correlation would be interesting and illustrative

minor essential Revisions: none
discernionary Revisions: none

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