

Review of: "CNN-MRI Detection of Fatty Infiltration, Rotator Cuff and Infraspinatus Muscle Atrophy in Shoulder Pain Patients"

Xiaohui Luo

Potential competing interests: No potential competing interests to declare.

This manuscript proposes a CNN-based method for the detection of fatty infiltration, rotator cuff, and infraspinatus muscle atrophy in shoulder pain patients. I think that the novelty is limited. In addition, authors should pay more attention to details. There are some problems that need to be addressed.

1. Lots of mistakes, such as 'shoulder arthroplasty {m/14,15/}' in the introduction, 'a Deep Convolutional Neural Network (CNN)' needs to be corrected to 'a deep convolutional neural network (DCNN),' etc. All proper nouns in the article need to be capitalized consistently.
2. The details of the CNNs used should be discussed, and the intention of using each component should be elucidated. Also, Figure 1 has no explanation, and the details in it are not clearly visible, especially the text. What does RPN stand for?
3. The article can be pseudocoded to show the coding process without putting the training process into the body of the article. The dataset is not discussed, and there is no information on whether it was preprocessed or not, or whether the MRI images were used raw or had been segmented into patches. The Discussion section should be discussed in conjunction with the table.