REPLY:

We thank Drs. Vargas and Dietemann for their interest in our article “Diagnostic Quality of 3D T2-SPACE Compared with T2-FSE in the Evaluation of Cervical Spine MRI Anatomy”¹ and their thoughtful comments and suggestions.

We agree with Drs. Vargas and Dietemann that T2-FSE is relatively a good sequence for the visualization of intrinsic spinal cord abnormality. However, to our knowledge, there have been no previous studies directly comparing its performance with T2-SPACE. The results of our study for the visualization of cord signal comparing the 2 sequences have been debated among our research team.

We do agree that the visualization of intrinsic cord signal and pathology is suboptimal with the T2-SPACE sequence; however, this was not the primary focus of this study. Subsequent studies should evaluate the role of T2-SPACE imaging as an adjunct sequence to visualize or not visualize cord pathology. This, however, was outside of the scope of our project.

Our study is not sufficient to provide guidance on the full range of imaging situations where T2-SPACE could be useful, but rather fills a void related to assessing the visualization of anatomic (not pathologic) cervical spine structures on MR imaging. We did not assess the diagnostic accuracy of T2-SPACE versus T2-FSE

sequences in assessing degenerative changes, which would be a separate analysis and paper. We have also noticed the “false superficial siderosis” appearance in some, but not all, T2-SPACE images. We did not feel it was as pronounced as the authors’ images show in their letter. With some training on visualizing T2-SPACE images, we believe that this appearance would not be problematic in clinical use.

Future well-designed diagnostic accuracy and comparative effectiveness studies will better inform radiologists of the uses and limitations of T2-SPACE for C-spine imaging.

REFERENCE

1. Chokshi FH, Sadigh G, Carpenter W, et al. **Diagnostic quality of 3D T2-SPACE compared with T2-FSE in the evaluation of cervical spine MRI anatomy.** *AJNR Am J Neuroradiol* 2017 Feb 2. [Epub ahead of print] CrossRef Medline

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