

LETTER TO THE EDITOR

Response to letter to the editor regarding “Diffusion-Weighted Magnetic Resonance Imaging in the Characterization of Odontogenic Cysts and Tumors”



To the Editor:

We would like to extend our thanks to Drs. Abbas Shokri and Kousar Ramezani for their interest in our study and for raising a practical concern about the use of diffusion-weighted magnetic resonance imaging (DWI). We agree with the writers that clinical imaging as well as cytologic and pathologic findings together assist in development of the appropriate management of a patient with a jaw lesion.

Difficulty in preoperative diagnosis of odontogenic keratocyst (OKC) has led researchers to attempt to find biochemical markers in cyst fluid aspirate as well as imaging criteria to enable a correct preoperative diagnosis. It is logical to deduce that the postulated contents of OKC responsible for restricted diffusion can be assessed on aspiration. Although economical and relatively nontraumatic, fine needle aspiration from a cystic jaw lesion is not a well-established technique for diagnosis.¹ It may at times be difficult to perform fine needle aspiration on an intraosseous lesion, especially when the overlying bone layer is thick. Trismus can make this procedure difficult to perform on a lesion located in the posterior mandible, a common location for OKC. In addition, the cellularity of the aspirate may be insufficient for diagnostic interpretation. The

quantity of keratinized cells required to establish the diagnosis of OKC is not known or well documented.²

Because imaging is critical for preoperative planning of jaw cysts and tumors, it seems worthwhile to explore additional diagnostic possibilities that arise from non-invasive imaging techniques. DWI has shown promising results in characterizing various benign and malignant lesions throughout the body without adding any significant time to the magnetic resonance imaging examination. High cost and limited availability can certainly be prohibitive, as has been correctly pointed out by Drs. Shokri and Ramezani. Hence, it may be rational to use DWI only in cases where there is a diagnostic dilemma. Our study is an endeavor to explore the potential of this versatile imaging modality.

Thank you again for raising this pertinent concern.

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