

MR Imaging of Epidermoid Tumors-Histopathological Correlation and Surgical Implications

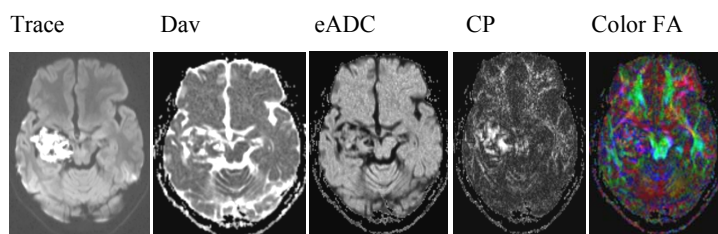
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Purpose: The purpose of this educational exhibit is to review the imaging appearance of cranio-spinal epidermoid tumors on MRI with histopathological correlation and its surgical implications.

Outline of Content: Forty- two cases of epidermoid tumors, which were evaluated with multiple MR imaging sequences were retrospectively analyzed and form the basis for this review. The common and uncommon locations and imaging appearance on routine MR sequences like T1, T2 and FLAIR and their differential diagnosis are discussed. The usefulness of high resolution, thin sections for delineation of the extent of the lesion, with sequences like CISS is also described. Advanced imaging with Diffusion Tensor and Tensor Metrics imaging with histopathological correlation is discussed in detail, especially that of high planar anisotropy (CP) and diffusion mode imaging. Use of perfusion imaging, SWI and spectroscopy is also mentioned. The pre- operative diagnostic utility of these techniques and their potential surgical implications for safe and complete removal are discussed.

Summary: Advanced MR imaging features of Epidermoid tumors for accurate pre- operative diagnosis are described and their potential surgical implications are discussed.



Epidermoid tumor showing no significant diffusion restriction and high planar anisotropy.