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REVIEWER'S COMMENT

Expert's comment concerning Grand Rounds case entitled "Paraspinal hibernoma: Grand Round presentation of a rare benign adipocytic tumor" by S. Ghailane et al. (Eur Spine J; 2017: DOI 10.1007/s00586-017-5124-5)

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Hibernomas are benign soft tissue tumors that resemble normal brown fat. Often large, they can be similar in clinical presentation to malignant liposarcomas (namely a painless, deep, large mass that may have undergone a recent increase in size).

In the largest series of reported hibernoma [1], the most frequent site of occurrence was in the thigh, followed by the shoulder, back and neck. There are several different histopathological variants, but they are all benign. Recurrence is unusual and malignant dedifferentiation has not been reported.

Anderson [2] and Kransdorf [3] have described the imaging characteristics of hibernoma. MRI characteristics are of high signal intensity on T1 sequences, very high intensity on T2, heterogeneous fat suppression and diffuse gadolinium enhancement. Because brown fat can be hypermetabolic PET-CT is not useful at distinguishing between hibernoma and liposarcoma and, therefore, is not recommended.

These appearances may be mistaken for a malignant soft tissue tumor and in which case a biopsy is sometimes undertaken. The biopsy will typically have features of brown fat including small cytoplasmic vacuoles, eosinophilic granular cytoplasm sometimes with an admixture of normal fat cells. They are almost always cytologically bland with an absence of mitotic figures and cytologic atypia. Approximately 10% have a myxoid stroma.

Conventional treatment is by planned marginal excision. Recurrence following surgical resection is unusual.

This case [4] highlights many of the features typical to hibernomas. Extension into the foramina is unusual. Marginal resection following biopsy has resulted in a 3-year disease-free interval with no evidence of recurrence.

Compliance with ethical standards

Conflict of interest I certify that there is no actual or potential conflict of interest in relation to this article.

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