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When is a geode not a geode: when LSMFT?

Sir, ‘LSMFT’ was an old American tobacco commercial, whose name is equally applicable to the subject of the article by Cohen and McWilliams [1]. The large lesion of the femoral neck with a sclerotic margin, no capsule, no communicating channel, containing ‘myxoid type tissue with adipose elements and some atypical features’ [1] is actually pathognomonic for what is now called liposclerosing myxofibrous tumour (LSMFT) [2]. A cross-section of an example from the 11th–15th century St Petersinsel, Switzerland, is illustrated in Fig. 1. The lesion described by Cohen and McWilliams [1] and that illustrated here in Fig. 1 are quite different in size and the nature of the margins from the pseudocysts of osteoarthritis [3, 4]. The multilobular character, transversely intact trabeculae and areas of micronodular bone formation are not compatible with a diagnosis of pseudocyst [3]. LSMFT has a predilection for the femoral neck (90%) and affects individuals aged 15–69 yr (average 42 yr) [2]. It is a benign, indolent fibro-osseous lesion with sclerotic margins (mild in 10%, moderate in 59% and extensive in 31% of cases). Mild to moderate radionuclide accumulation may be noted on the technetium bone scan. As 10% of cases proceed to malignant

Fig. 1. Cross-sections of a medieval Swiss case of LSMFT.
degeneration, it is important to distinguish LSMFT from pseudocysts.
Liposclerosing myxofibrous tumour is certainly a
more socially acceptable appellation than ‘Lucky
Strike Means Fine Tobacco’ for the acronym, LSMFT.
Further, LSMFT seems a precise identification for the
lesion described by Cohen and McWilliams [1].

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1. Cohen AP, McWilliams TG. Giant geode (pseudocyst) formation of the
2. Ragsdale BD. Polymorphic fibro-osseous lesions of bone: An
almost site-specific diagnostic problem of the proximal femur.
Human Pathol 1993;24:305–12.
3. Resnick D, Niwayama G, Coutts RD. Subchondral cysts (geodes)
in arthritic disorders: Pathologic and radiographic appearance of the

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Reply
We thank Rothschild and colleagues for allowing us the
opportunity to clarify the histological findings relating
to the lesion we described. The histological findings were
those of a myxoid, paucicellular tissue including scat-
tered blood vessels. The term ‘adipose elements’ in the
context we intended referred to the vascular and cellular
pattern observed which led to the initial concern regarding
the possibility of a myxoid liposarcoma. Subsequent
expert review of the histology confirmed that there
were no lipomatous areas or lipoblasts seen within the
lesion, nor were there any areas of fibrosis within its
matrix. A diagnosis of primary liposarcoma or, for that
matter, any other malignant or premalignant condition,
was excluded, and a diagnosis of geode (pseudocyst)
confirmed. They have interpreted the X-ray provided as
showing transversely intact trabeculae. This was not the
case; indeed no interstitial sclerosis was noted and
the bony pattern shown was entirely contained within
the periphery of the lesion. No osseous elements were, in
fact, seen within the matrix of the lesion. In summary,
the absence of lipomatous, sclerosing or fibrous features
in this lesion is inconsistent with a diagnosis of lipos-
clerosing myxofibrous tumour as described by Ragsdale
[1], and is entirely compatible with geode formation. We
acknowledge that the use of the term ‘adipose elements’
in describing the initial histology was rather misleading,
and apologise for any confusion caused. The response
by Rothschild and colleagues reinforces the point that
such lesions in bone can create diagnostic difficulty.

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1. Ragsdale BD. Polymorphic fibro-osseous lesions of bone: An
almost site-specific diagnostic problem of the proximal femur. Hum
Pathol 1993;24:305–12.