# Letter to the Editor

### Dear Cutis<sup>®</sup>:

I read with interest the letter by Lane et al, "Floating Lipoma: An Unusual Presentation of a Common Tumor" (Cutis. 2007;79:197), because I recently had 2 such cases. Lipomas are almost ubiquitous in the adult population and typically present as easily compressible, mobile nodules. Mobile encapsulated lipomas, also known as nodular cystic fat necrosis, differ slightly in that they typically display a greater degree of mobility. Mobile encapsulated lipomas are believed to arise from acute vascular compromise to single or multiple lobules of adipose, most likely as a result of trauma. The lesion becomes separated from the surrounding tissue with the formation of a thin fibrous capsule that creates a distinct plane of cleavage. The sequestered nature of the lobule prevents it from being absorbed.<sup>1,2</sup> Histologically, the lesion consists of a core of necrotic adipocytes, often with focal lipomembranous changes, surrounded by a fibrous capsule without associated inflammation (Figure). The degree of fat necrosis depends upon the timing of the biopsy and early lesions often show a gradual transition from viable to nonviable adipocytes.<sup>1,2</sup> Long-standing lesions may show focal dystrophic calcification. In conclusion, a mobile encapsulated lipoma is a distinct clinical and histologic entity that is believed to occur as the result of focal fat necrosis that subsequently becomes walled off from the surrounding tissue.

Sincerely, Elizabeth K. Satter, MD San Diego, California



Well-circumscribed dermal nodule consisting of a core of necrotic adipocytes with focal lipomembranous changes surrounded by a fibrous capsule (H&E, original magnification ×2).

The author reports no conflict of interest.

## REFERENCES

- 1. Azad SM, Cherian A, Raine C, et al. Encapsulated fat necrosis: a case of 'thigh mouse'. Br J Plast Surg. 2001;54:643-645.
- Sahl WJ Jr. Mobile encapsulated lipomas. formerly called encapsulated angiolipomas. Arch Dermatol. 1978;114: 1684-1686.

### **Authors Response**

We thank Dr. Satter for her comments. We are in agreement that the fatty lesion we described likely was a mobile encapsulated lipoma, also known as nodular cystic fat necrosis.<sup>1</sup> We suggest that floating lipoma could serve as a third, less formal name.



Well-circumscribed lesion consisting of a fibrous capsule surrounding pale-staining necrotic adipocytes and scattered lipomembranous changes (H&E, original magnification  $\times 100$ ).

As Dr. Satter mentions, mobile encapsulated lipomas are believed to arise from acute vascular compromise to one or more adipose lobules, likely resulting from trauma, as we surmised in our patient.<sup>2</sup> Histologically, the major features are necrotic adipocytes and lipomembranous changes.<sup>2,3</sup> In our case, the lesion had a thin fibrous capsule surrounding necrotic adipocytes and scattered lipomembranous changes (Figure). Azad et al<sup>2</sup> proposed that the degree of fat necrosis depends upon lesion age, with earlier lesions showing a transition from viable to nonviable adipocytes. In our case, this transition

seemed advanced and consistent with the patient's 2-year clinical history.

Sincerely, Joshua E. Lane, MD Columbus, Georgia

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The authors report no conflict of interest.

# REFERENCES

- Sahl WJ Jr. Mobile encapsulated lipomas. formerly called encapsulated angiolipomas. Arch Dermatol. 1978;114: 1684-1686.
- 2. Azad SM, Cherian A, Raine C, et al. Encapsulated fat necrosis: a case of 'thigh mouse'. Br J Plast Surg. 2001;54:643-645.
- 3. Trapp CF, Baker EJ. Mobile encapsulated lipomas. Cutis. 1992;49:63-64.