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DERMATOLOGIC THERAPY WILEY

LETTER

Axillary giant lipoma opening to the skin surface: A unique presentation mimicking accessory breast

Dear Editor,

A 78-year-old female presented with a slowly growing mass on the left axillary region. Physical examination showed a painless giant mass 11 × 8.5 cm in diameter, protruding from the left axillary region. Her past medical history included significant overweight, cerebrovascular stroke, goiter, and hypertension. The patient was bedridden for 5 years due to cerebrovascular stroke. She had no history of surgery or trauma to the left axillary region. Physical examination showed an

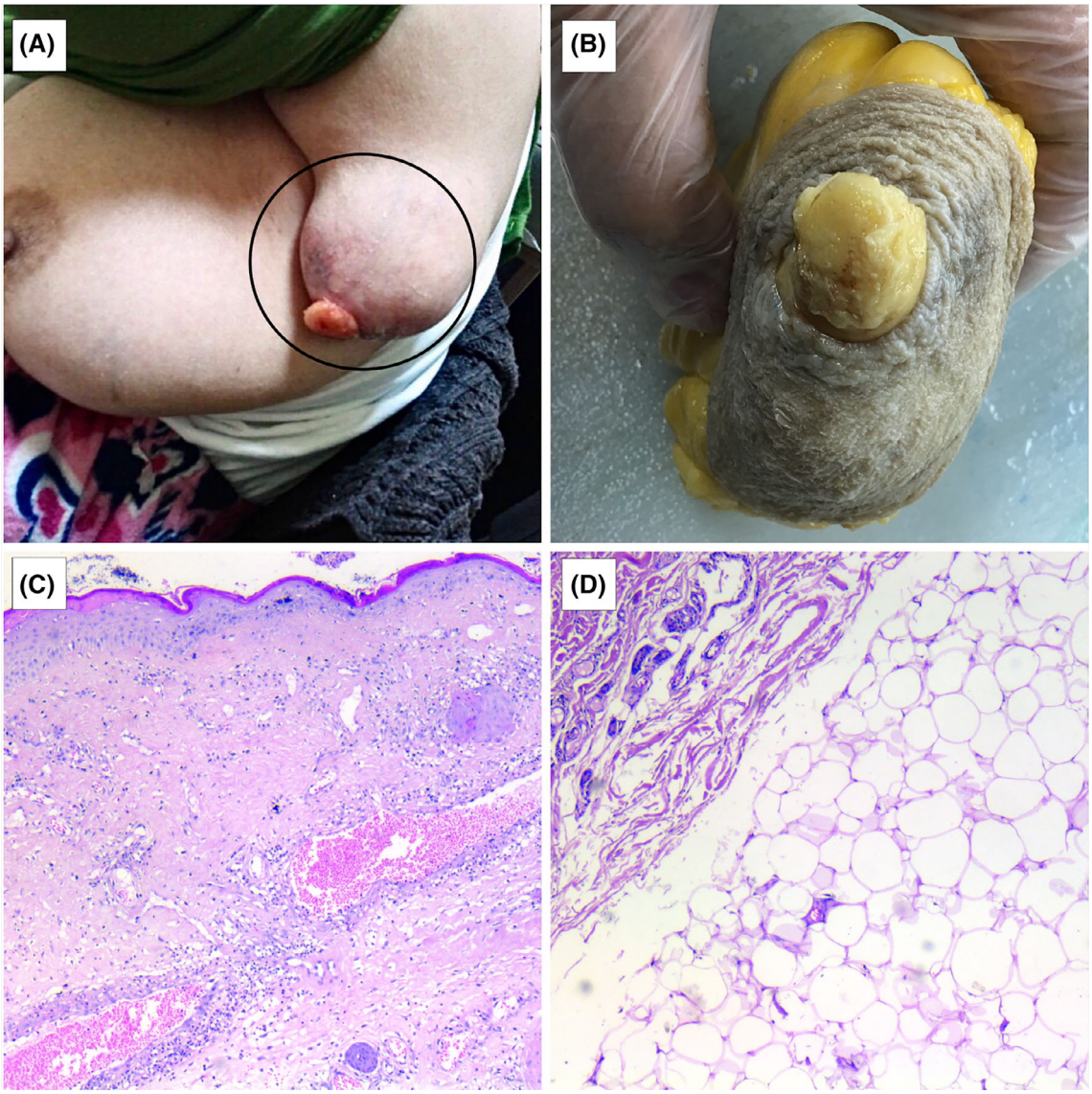

FIGURE 1 A giant axillary mass with spontaneous rupture 11 × 8.5 cm in diameter, protruding from the left axillary region (A). Gross examination of the excision specimen showed an encapsulated yellow fatty tissue partially opened to the skin surface (B). H&E sections of the overlying skin showed epidermal atrophy, degenerated collagen fibers, numerous dermal dilated vascular structures and mixed inflammatory infiltration (C). H&E sections of the mass revealed mature benign adipose tissue (D)

axillary giant mass 11 × 8.5 cm reminiscent of accessory or ectopic breast tissue. The lesion spontaneously perforated and opened to the skin surface giving an areola-like appearance (Figure 1A). No other lesions were detected in the rest of the body. A total excision was performed with a preliminary diagnosis of giant lipoma. During surgery, the lesion was easily dissected off from the surrounding tissues. Gross examination of the excision specimen showed an encapsulated yellow fatty tissue partially opened to the skin surface (Figure 1B). Histopathological examination revealed mature benign adipose tissue without metaplastic changes, cellular or nuclear pleomorphism (Figure 1C). The overlying skin showed epidermal atrophy, degenerated collagen fibers, numerous dermal dilated congested vascular structures, and mixed inflammatory infiltration (Figures 1D and 2). Serial sections showed no evidence of ectopic breast tissue. A diagnosis of giant lipoma was made based on the clinical and histopathological findings.

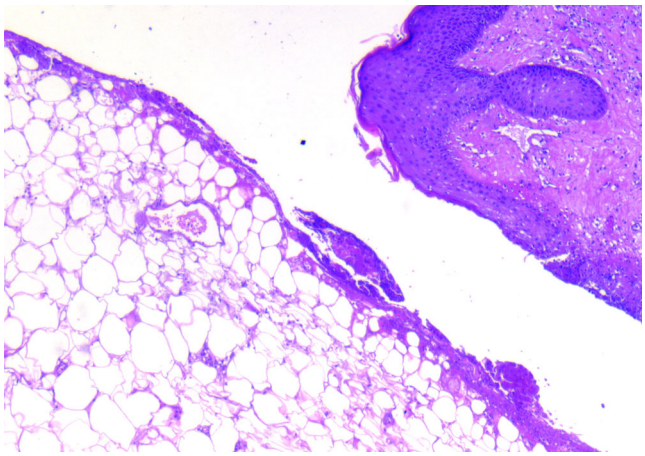

FIGURE 2 Perforated part of the lipoma with surrounding skin (H&E)

Lipomas are benign tumors of mature adipose tissue originating from subcutaneous tissue or internal organs.[1] A total of 10 patients with axillary giant lipoma has been reported in the relevant literature[2-10] (Table 1). However, none of them showed spontaneous perforation. The pathogenesis of the uncontrolled growth of giant lipomas is clearly unknown. It has been suggested that rupture of the fibrous septa following trauma may cause proliferation of adipose tissue. According to another hypothesis, local inflammation related to trauma may induce differentiation of preadipocytes and disrupt the normal regulation of adipose tissue.[7] We thought that, in the current patient, the growth of the lesion may have been triggered by repetitive microtrauma caused by each movement of the upper limb. Prolonged pressure on the lesional area due to the patient being bedridden may have caused the overlying skin to break down and eventually rupture. Epidermal and dermal histopathological changes observed in our case may reflect tissue responses to ischemia caused by persistent pressure on the skin overlying the mass. The force exerted by the mass on the overlying skin may also have contributed to this process. Epidermal atrophy and dermal congested dilated vessels may explain the areola-like appearance observed in the skin surrounding the perforated part.

The major difficulty in the diagnosis of giant lipomas is excluding liposarcomas. The physical examination usually does not provide remarkable clues for the differential diagnosis between lipomas and liposarcomas. Imaging studies and partial biopsies may be helpful in the differential diagnosis. Nevertheless, the histopathological examination of the total excision material is crucial for an exact diagnosis.[7] In our case, histopathological examination of the entire lesion showed completely benign mature adipose tissue without worrisome findings including atypical adipocytes, mitosis, and necrosis.

TABLE 1 The main features of the patients with axillary giant lipoma reported in the relevant literature

Case	Gender	Age	Duration	Site	Treatment	Pathologic specimen size	Changes in overlying skin
1	Male	15	9 years	Left axilla	Total excision with primary closure	19 × 16 × 14 cm	None
2	Female	50	18 months	Right axilla	Total excision with primary closure	20 × 18 × 9 cm	None
3	Male	32	4 years	Right axilla	Total excision with primary closure	24 × 10 × 6 cm	Unremarkable except for dilated veins
4	Female	62	6 years	Left axilla	Total excision with primary closure	16 × 15 × 5 cm	None
5	Male	70	5 years	Right axilla	Total excision with primary closure	Unavailable	None
6	Male	47	4 months	Right axilla	Total excision with primary closure	28 × 24 × 4 cm	None
7	Female	42	2 months	Left axilla	Total excision with primary closure	10.5 × 8 × 3 cm	None
8	Male	60	5 years	Right axilla	Total excision with primary closure	15 × 10 cm	None
9	Male	38	9 years	Left axilla	Total excision with primary closure	32 × 15 × 6 cm	None
10	Male	18	Unavailable	Left axilla	Total excision with primary closure	23 × 10 × 5 cm	None

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

AUTHORS CONTRIBUTION

Asuman Kilitçi, Ömer Faruk Elmas: Literature searching, designing and writing the manuscript. Asuman Kilitçi, Ömer Faruk Elmas, Abdullah Demirbaş, Osman Memiş: Substantial contributions to conception and design, interpretation of data. Asuman Kilitçi, Ömer Faruk Elmas, Mustafa Atasoy, Ümit Türsen, Torello Lotti: Editing, revising and final approval of the manuscript.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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