# Multiple giant clear cell acanthomas

Sir,

Clear cell acanthoma, first described by Degos in 1962,[1] was originally thought to be a benign epidermal tumor. However, recent studies suggest that it is a reactive inflammatory dermatosis. Immunohistochemically, it shows a staining pattern similar to inflammatory dermatoses such as psoriasis vulgaris, lichen planus and discoid lupus erythematosus. The etiology remains unknown.[1,2] The lesion is typically slow-growing, asymptomatic, solitary and located on the legs, although all parts of the body can be affected. It tends to affect people aged 50–70 years and usually consists of a sharply demarcated, dome-shaped nodule or plaque, 5–20 mm in diameter. The most characteristic clinical features are a thin wafer-like scale forming a peripheral collarette, slight moisture and numerous pin-point sized blanchable vascular punctae scattered over the surface.

An 81-year-old woman was seen in the department of dermatovenereology, Bezmialem Vakif University Hospital, Istanbul, Turkey, complaining of itchy papules and nodules on both lower extremities. She reported that these nodules first appeared on the right calf 40 years ago. Twenty years later, satellite papules started appearing around the initial, larger nodule on

her right calf. Subsequently, similar lesions were noted on the left leg and both thighs. The lesions had been itching and bleeding over the last few years. Her past medical history was significant for hypertension and hypothyroidism for which she was on levothyroxine and atenolol/chlorthalidone. None of her family members had similar lesions. On physical examination, there was a 40 mm × 30 mm, red, sharply demarcated nodule with satellite papulo-nodules on her right calf. There were scattered, well defined papules and nodules (5–15 mm) with a thin rim of scale on both posterior lower extremities. Three biopsies were performed from lesions from both legs [Figure 1].

On histological examination, there was epidermal acanthosis with the proliferation of clear cells containing intracytoplasmic glycogen. Periodic-acid–Schiff staining was positive. Clear demarcation was seen between the lesion and adjacent normal epidermis. There were neutrophils in the stratum corneum. The blood vessels in the papillary dermis were dilated and increased in number. Based on these findings, a diagnosis of multiple clear cell acanthoma was made [Figure 2].

The first case of multiple clear cell acanthoma was described in 1964 by Delacretaz *et al.*[3] Several variants of the condition including giant, polypoid, pigmented and eruptive patterns have been described. The eruptive form is characterized by more than 30 papules which arise within a month. Multiple and giant forms are rare; we were able to find 38 cases of multiple and 9 giant clear cell acanthoma in the literature. Two out of the nine cases of giant clear cell acanthomas had multiple lesions. Langtry *et al.* reported a case with multiple giant (40 mm) lesions and a lesion 10 mm × 12 mm in size on the left buttock of an 87-year-old woman.[4] Kim *et al.* reported a 14-year-old girl with a 2-month history of two erythematous nodules measuring 20 mm × 32 mm and 40 mm × 55 mm on the perianal area.[5]

We present a case of multiple clear cell acanthomas with a giant lesion and a total of 11 lesions. We found 38 previous reports of multiple clear cell acanthoma in the literature [Table 1].[1-35] The most prominent associations were xerosis (6/39) and ichthyosis (4/39). Our patient had mild xerosis too.

The clinical differential diagnosis is broad and includes basal cell carcinoma, squamous cell carcinoma, Bowen's disease, actinic keratosis, hemangioma, dermatofibroma, inflamed seborrheic keratosis, verruca vulgaris, amelanotic melanoma, psoriasis, histiocytoma, eczematous dermatitis, nevus, parapsoriasis and pyogenic granuloma.[1-5] Our patient had multiple red nodules with a vascular appearance. Hence, our clinical differential diagnosis was Kaposi sarcoma and B-cell lymphoma. Morrison *et al.* reported 411 histologically confirmed cases but noted that rarely had the condition been recognised clinically.[1] They considered that this might be due to a variable clinical appearance with overlapping features of several other lesions making it difficult to distinguish, or because it was an entity that was rare and not frequently suspected.[1]

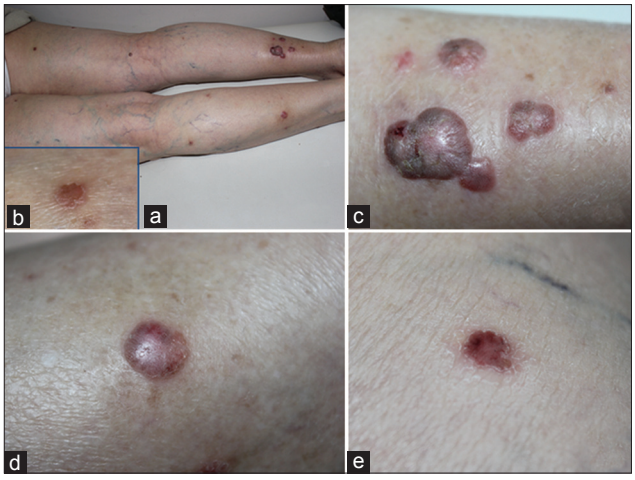


**Figure 1: Appearance of the posterior side of lower extremities (a). There was a 40 mm × 30 mm red, sharply demarcated nodule and 10 mm × 20 mm satellite papulonodules around it on her posterior side of right leg (c). There was scattered 5 mm, 10 mm, 15 mm papules and nodules with sharply demarcated margins and a thin collateral rim of scale on her posterior side of both lower extremities (b,d and e)**

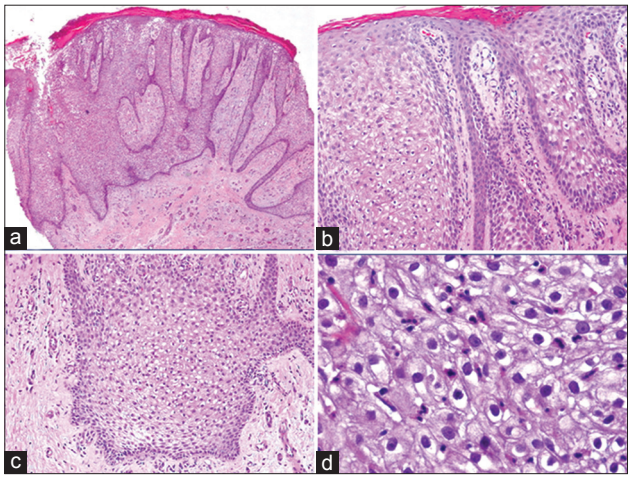


**Figure 2: On histological examination epidermal acanthosis, pale appearance of the keratinocytes and intraepidermal neutrophils were seen. In the dermis, there was proliferation of blood vessels and perivascular infiltration of lymphocytes, histiocytes and neutrophils. (a) H and E, ×40 (b) H and E, ×100 (c) H and E, ×100 (d) H and E, ×200**

**Table 1: Features of multiple CCA* are listed in Table 1.1-7**

| Case | Sex | Age | Site | Number of lesions | Associated diseases | References |
|---|---|---|---|---|---|---|
| 1 | Female | 51 | Legs | Multiple | - | Delacretaz *et al*. |
| 2 | Male | 62 | Legs | 16 | - | Duperrat *et al*. |
| 3 | Female | 41 | Thighs, legs | 4 | - | Delacretaz *et al*. |
| 4 | Male | 59 | Thighs, legs | 7 | Lamellar ichthyosis | Thorne *et al*. |
| 5 | Male | 64 | Thighs, legs | 7 | Lamellar ichthyosis | Landry *et al*. |
| 6 | Male | 73 | Legs | 2 | Ichthyosis vulgaris | Landry *et al*. |
| 7 | Male | 68 | Legs | 8 | Varicose veins, kserosis | Ebner *et al*. |
| 8 | Female | 56 | Legs | 10 | - | Kaufmann *et al*. |
| 9 | Female | 64 | Legs | 10 | Varicose veins | Dcsmons *et al*. |
| 10 | Female | 45 | Legs | 7 | - | Dcsmons *et al*. |
| 11 | Female | 14 | Leg | 4 | - | Witkowsk *et al*. |
| 12 | Female | 65 | Lower limbs | 124 | - | Varotti *et al*. |
| 13 | Female | 69 | Legs, trunk, chest | 12 | Seborrheic keratosis, xerosis | Trau *et al*. |
| 14 | Male | 63 | Trunk, legs | 6 | - | Goette *et al*. |
| 15 | Female | 58 | Upper/lower limbs | 30 | Xerosis | Balus *et al*. |
| 16 | Female | 37 | Forehead, trunk, upper/lower limbs | 16 | Hodgkin's disease | Balus *et al*. |
| 17 | Female | 64 | Thighs, legs | 30 | - | Naeyaert *et al*. |
| 18 | Male | 43 | Lower limbs | 43 | - | Dupre *et al*. |
| 19 | Male | 59 | Lower limbs | 4 | Xerosis | Baden *et al*. |
| 20 | Male | 57 | Legs | 15 | Seborrheic keratosis, gynecomastia | Williams *et al*. |
| 21 | Male | 70 | Arms, lower limbs | 30 | - | Donati *et al*. |
| 22 | Male | 50 | Buttock, lower limbs | 50 | - | Donati *et al*. |
| 23 | Female | 50 | Legs | 12 | - | Kavanagh *et al*. |
| 24 | Female | 32 | Legs, buttocks, trunk, arms | >400 | Family history: father and brother with psoriasis | Morillo *et al*. |
| 25 | Male | 54 | Legs | Multiple | Chronic venous insufficiency | Kneitz *et al*. |
| 26 | Male | 57 | Anterior thigh | Multiple | SCC**,BCC***,HT****,HC*****, condyloma acuminata | Bang *et al*. |
| 27 | Male | 74 | Lower extremities | 60 | - | Monari *et al*. |
| 28 | Female | 14 | Genital | 2 | - | Kim *et al*. |
| 29 | Female | 65 | Thighs, buttocks and lower legs | Multiple | HT****, hypercholesterolemia, and diabetes | Garcia-Gavin *et al*. |
| 30 | Female | 52 | Lateral cheek | 4 | - | Hatakeyama *et al*. |
| 31 | Female | 16 | Inner thighs | Multiple | - | Wilson *et al*. |
| 32 | Female | 40 | Arms, upper thigh | 4 | Ichthyosis bullosa (superficial epidermolytic ichthyosis) ichthyosis bullosa | Jacyk *et al*. |
| 33 | Female | 76 | Thighs | 5 | Multiple Bowen's disease | Shirai *et al*. |
| 34 | Male | 52 | Legs | Multiple | - | Martínez Escanamé *et al*. |
| 35 | Male | 69 | Legs | 20 | - | Lacarrubba *et al*. |
| 36 | Male | 59 | Legs | 17 | Varicose veins and dry skin | Betti *et al*. |
| 37 | Male | 52 | All parts of body | >100 | - | Fandrey *et al*. |
| 38 | Female | 38 | Legs, arms and trunk | >100 | - | Burg *et al*. |
| 39 | Female | 81 | Legs, thighs | 10 | HT***, goiter, hypothyroidism | Su *et al*.(our case) |

CCA*: Clear cell acanthoma, SCC**: Squamous cell carcinoma, BCC***: Basal cell carcinoma, HT****: Hypertension, HC*****: Hepatitis C

Treatment consists of electrofulguration, curettage, surgical excision, cryotherapy, carbon dioxide laser and topical 5-fluoruracil. The most common treatment option for multiple lesions is cryotherapy, which was also performed in our patient

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## Conflicts of interest

There are no conflicts of interest.

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