#### Case 25.1

A 53 year-old Thai female from Bangkok

**Chief complaint**: Solitary asymptomatic nodule on right leg for 3 months

# Present illness:

The patient presented with solitary asymptomatic nodule of 3 months' duration. There was no fever or body weight loss. She denied history of preceding trauma, scratching or insect bite.

# Past history:

Her medical history was systemic lupus erythematosus, hypertension and chronic kidney disease. She was currently taking prednisolone, cyclosporine, losartan, simvastastin, and atenolol.

### Physical examination:

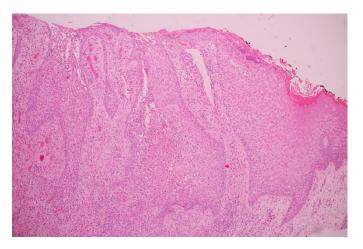
HEENT: not pale conjunctivae, anicteric sclerae, no lymphadenopathy Abdomen: no hepatosplenomegaly Extremities: no pitting edema

### Skin examination:

• Solitary well circumscribed red to brownish nodule of 1 cm in diameter with moist surface on right leg.



Histopathology: (S16-17406A, right leg)



- Sharply demarcated and epidermal hyperplasia with fused, elongated rete rides
- Epidermal composed of keratinocytes with pale cytoplasm, spongiosis, erosion

- Neutrophils within the dermis and crust on the surface
- Dense infiltrate of lymphocytes, neutrophils and eosinophils with dilated capillaries in the underlying dermis

**Diagnosis:** Clear cell acanthoma **Treatment:** Surgical excision

**Presenter:** Panadda Darukarnphut, M.D. **Consultant:** Salinee Rojhirunsakool, M.D.

#### Case 25.2

A 61 year-old Thai female from Prachinburi **Chief complaint**: Solitary asymptomatic red plaque on right breast for 1 year

## Present illness:

Our patient noticed asymptomatic red plaque on her right breast for 1 year. She denied any trauma or procedure at the area before. There was no rash on other areas of her body.

### Past history:

Her medical history is significant for hypertension.

# Skin examination:

 A solitary, 2x1 cm, well defined, erythematous plaque with collarette scale and small foci of vascular puncta on right breast.



#### Histopathology: (S16-23542A, right breast)



- Dome-shaped, sharply demarcated psoriasiform epidermal hyperplasia with interwining of elongated rete ridges
- Epidermis scattered neutrophils, focal absence of granuloma layer, and covered with scale crust
- Inflammatory-cell infiltrate of lymphocytes neutrophils and melanophages with dilated capillaries in the underlying dermis

**Diagnosis:** Clear cell acanthoma **Treatment:** Surgical excision

**Presenter:** Panadda Darukarnphut, M.D. **Consultant:** Salinee Rojhirunsakool, M.D.

#### **Discussion:**

Clear cell acanthoma (CCA) is a benign epidermal lesion of epidermal keratinocytes, and is also known as 'Degos acanthoma' or as 'pale acanthoma' which describes the characteristic histopathological hallmark. The pathogenesis and aetiology of CCA remains unknown.<sup>1</sup> It may be a benign tumor that sites of origin include epidermis, hair follicles, and acrosyringium/sweat gland,<sup>2</sup> or a reactive inflammatory disease.<sup>4,5,6</sup>

CCA usually occurs in middle-aged patients and there is no gender predilection. The clinical presentations of CCA are vary. The differential diagnoses depend on the clinical type of CCA that seen in the patients. There are many variants of CCA including giant, polypoid/peduculated, pigmented, eruptive, atypical and cystic pattern. The most common clinical manifestation of CCA is asymptomatic solitary pink, red to brown, dome-shaped, papule or nodule, ranging from 3 to 20 mm in size and is often covered by a thin collarette of scale. CCA grows slowly, commonly over a period of 2–10 years. The surface is either crusted or moist, and often contains vascular puncta, which bleed on minor trauma. The common locations of CCA include the leg, thigh, back, abdomen and chest.<sup>3</sup>

Dermoscopy features of CCA reveal red dots, globules and glomeruloid structures, some of which are linear in arrangement, forming an incomplete vascular reticular pattern. Dermoscopic recognition of CCA may help to avoid unnecessary biopsies or surgical excision.<sup>7,8</sup>

The histopathological is characterized by a well-demarcated area of psoriasiform epidermal hyperplasia with keratinocytes with pale staining cytoplasm. Mild spogiosis, exocytosis, of neutrophils. The cell pallor in clear (pale) cell acanthoma is secondary to increased glycogen content, which is secondary to decreased phosphorylase. Because of its increased glycogen content, the pale cells are PAS positive and diastase sensitive.<sup>1,9</sup>

Treatment options of CCA depend on size, location, number of lesions, and the surgical experience of the medical provider. Surgical treatments consist of excision, Mohs micrographic surgery, curettage, and electrofulguration. Cryotherapy and carbon dioxide laser may be suitable for multiple lesions, especially in the area where excision is difficult. The number of treatments also varies with the lesion size and the technique used. There are few reported cases of recurrence after excision.<sup>10,11,12</sup>

In summary, we present two case of middle age women with clear cell acanthoma. Both of them presented with a solitary, asymptomatic, red to brownish nodule and plaque. The clinical and histopathological findings suggested the diagnosis of clear cell acanthoma. They was treated by surgical excision with no recurrence observed.

#### References

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