

### Case 23

A 62-year-old Thai woman from Bangkok

**Chief complaint:** A slightly fast-growing nodule on left chest wall over 6 months

**Present illness:** The patient presented with a solitary erythematous papule on her left chest wall. 6 months later, the papule gradually increased in size to a 2-centimeter diameter with slightly pruritus.

**Past history:** Osteoporosis on Fosamax (70 mg.) 1 tab weekly, CaCO<sub>3</sub> (1,350) 1 tab once daily

**Family history:** No history of CA breast or skin cancer.

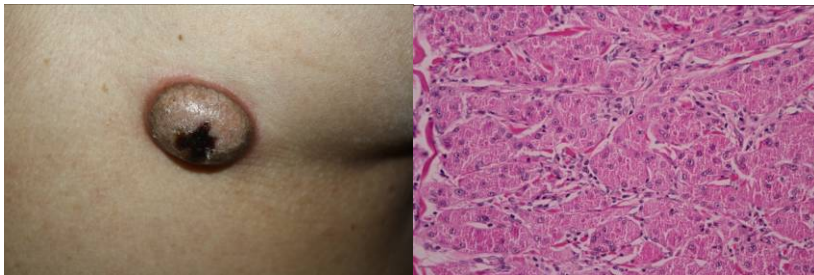
#### **Skin examination**

A solitary, well-defined, erythematous to brownish, hard consistency nodule with 2 cm. in diameter on left chest wall. No other skin manifestations. Otherwise are unremarkable.

#### **Histopathology** (S11-08017)

Well circumscribed dermal mass composed of multiple lobules of uniform large round or polygonal cells

The tumor cells composed of uniformly round small centrally situated nuclei and abundant granular eosinophilic cytoplasm



**Diagnosis:** Granular cell tumor

**Treatment:** Excision

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### Discussion:

Granular cell tumor is benign, relatively rare tumor of nerve sheath origin which mainly occurs in the third to fifth decade of life and predominantly presents in women.<sup>1-2</sup> The tumor typically presents as slow-growing, solitary, skin-coloured or brownish red, asymptomatic or occasionally pruritic or tender lesions only 10% of patients have multiple lesions.<sup>3</sup> The most common sites involve head and neck regions (30% on tongue).<sup>4</sup> The other common sites are female genital organs.<sup>5-8</sup>

The pathogenesis of granular cell tumor remains unclear but the neural origin has been proposed since granular cells express S 100 protein and CD 57 as in Schwann cell tumors.<sup>9-10</sup>

Patients with multiple lesions especially in children should have a complete physical examination to rule out underlying somatic and genetic syndromes eg. Neurofibromatosis and Noonan syndrome because granular cell tumor is the neutrally derived neoplasm.<sup>3</sup>

Histopathology demonstrates a nodular or infiltrative growth pattern with groups and nests of polygonal cells with granular, eosinophilic cytoplasm with dark nuclei. These granules are positive to PAS reaction. Immunohistochemistry has shown diffuse S-100 positivity, CD 68 positivity and membranous vimentin positivity.<sup>11</sup>

Malignant granular cell tumor is extremely rare, comprising 1-2% of all granular cell tumors.<sup>12</sup> Metastases are commonly seen in lungs and lymph nodes. Radiologic evaluation is needed to identify.<sup>4</sup>

The differential diagnoses for granular cell tumor are dermatofibroma, adnexal tumors, compound melanocytic nevi and seborrheic keratosis. The treatment of granular cell tumor is

excision. Prognosis is good if the complete excision has been performed. Incomplete excision may cause local recurrence.

In this case, the excisional biopsy was done with satisfying outcomes. No signs of local recurrence have been detected.

## References

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