Granular Cell Tumour

Dear Editor,
Granular cell tumour is a benign tumour of Schwann cell origin. It can occur in skin, subcutaneous tissue, submucosa, and deep soft tissue and internal organs but is most common in head and neck region particularly tongue. Rarely, has it been documented to present as an inguinal swelling.\(^1\)\(^-\)\(^4\)

A 13-year-old boy presented with a gradually increasing swelling in the left inguinal region for two years. This was associated with a dull aching pain. He had no significant illnesses in the past or any familial diseases.

His general examination was unremarkable. Local examination revealed a swelling of 3 × 2 cm in the left inguinal region near the root of penis [Figure 1a]. It was non-tender, firm and mobile. There was no impulse on cough. The cord structures, testes and external genitalia were normal. Ultrasonography of the abdomen was normal. Ultrasound of the swelling showed a hypoechoic lesion of 1.2 cm with loss of fatty hilum. Both the testes and epididymis were normal. A provisional diagnosis of an enlarged inguinal lymph node was made. Fine needle aspiration cytology showed uniform appearing large polyhedral cells arranged in sheets. These cells had small round nuclei and abundant dense granular cytoplasm. These features suggested a possibility of a granular cell tumour.

Since the patient was symptomatic, a decision to excise the swelling was made. Intra-operatively, the swelling (3 × 3cm) was in the subcutaneous plane in the inguinal region [Figure 1b]. It was adherent to the external oblique aponeurosis. Enbloc excision of the swelling was done. On cut section, the tumour showed solid areas with interspersed fatty tissue [Figure 1c and d]. Histopathology confirmed the findings of cytology. All margins were free of the tumour. Immunohistochemistry was positive for S100 protein [Figure 2]. Post-operatively, the wound healed well with no complications. The patient was advised a regular yearly follow-up.

The common causes of inguinal swelling in adolescents
include lipoma, fibroma, fibrolipoma, dermatofibroma, hamartoma, lymphatic or venous malformations. Rarely, as seen in present case, granular cell tumour has been documented to present as inguinal swelling. It commonly affects third to fourth decades of life. However, the present patient was much younger. Familial associations are infrequent. These neoplasms are usually small ranging in size from 5 mm to 2 cm and slow growing. They are well-circumcised and firm.

These tumours are non-encapsulated and composed of irregularly arranged sheets of large polyhedral cells with small central hyperchromatic nuclei and abundant eosinophilic, PAS-positive granular cytoplasm. The overlying epithelium often shows prominent pseudo-epitheliomatous hyperplasia, which may be misdiagnosed as squamous cell carcinoma if a superficial biopsy is taken for examination. Recent studies on ultrastructure and immunohistochemistry have proven it to be of Schwann cell differentiation. The cells are positive for S-100, CD68, protein gene product 9.5, and inhibin-alpha.[5]

The malignant counterparts of these tumours are exceedingly rare. The treatment of choice for benign tumours is observation or wide local excision. Recurrent granular cell tumours may benefit from adjuvant radiotherapy.[6] Chemotherapy has shown promise in metastatic granular cell tumour.[7] In this patient, the tumour was excised enbloc and histopathology was suggestive of a benign tumour with tumour-free margins. So, the patient was asked to follow-up annually.

Granular cell tumour being rare in the inguinal region, is usually not suspected clinically and the diagnosis is usually made on histopathology/cytology.

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Dear Editor,

The basic principle of facial plastic and reconstructive surgery is the removal of the tumour with optimal aggressiveness, and the operational defects must be closed with the simplest method. The involvement of deep margins correlates with a higher incidence of relapse, and so there is a further indication for re-excision. We can use three techniques to evaluate the margins: Mohs micrographic surgery, extemporaneous histological examination, and in cases where it is not possible to use the previous methods, a defect can be left open for a few days (without a considerable disadvantage) until the definitive histological examination.

When Expanding a Margin of Skin Cancers After Reconstruction with Local Flap: Where to Do It?

Often, when re-excision is required in an area previously reconstructed by locoregional flaps, there may be difficulties in finding the points where the enlargement needs to be made.

In order to make this decision, three key points need to be clarified:

1. Which margin is positive?
2. Which type of local flap we used to repair the defect?
3. What kind of movement the flap undergoes? [Figure 1].

For example, we report a case of a female, S.Q., 62-years old, who underwent excision of BCC in the caruncle and internal canthus of the left eye and immediate reconstruction with frontal flap [Figure 2a]. The excision and re-excision [Figure 2b] revealed a marginal recurrence, and the patient underwent a second re-excision [Figure 2c]. The definitive histological examination showed a deeper margin involvement requiring a more aggressive approach.

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