Giant Pigmented Basal Cell Carcinoma: A Case Report

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Abstract:
The majority of basal cell carcinomas (BCCs) occur on sun-exposed areas. BCCs arising on the lower extremities and ones over 5 cm in size are called Giant BCC and are exceedingly rare. We reported a very rare case of a Giant, Pigmented BCC presenting on thigh.

Key words: Giant Pigmented Basal Cell Carcinoma; Lower extremity.

INTRODUCTION
Basal cell carcinoma (BCC) is the most common of all skin cancers and the most prevalent one among Caucasians¹. Giant BCC (GBCC) is, on the contrary, a rare skin malignancy characterized by an aggressive biological behaviour, deep tissue invasion with infiltration of the dermis and involvement of extra dermal structures such as bone, muscle and cartilage, as well as by metastasis and frequently carries a poor prognosis². Pigmented BCC comprises 6% of all the basal cell carcinomas³. BCCs are found predominantly on areas of skin exposed to the sun⁴. There are isolated reports documenting involvement of the lower extremities⁵. We report a very rare case of GBCC over 5 cm in diameter on the thigh.

CASE REPORT
A 72 years old male patient presented with a swelling in the back of the left thigh since 15 years. On examination, (Fig. 1) it was a well circumscribed, large swelling of size 6x5 cm seen over the posterior aspect of left mid-thigh. The overlying skin was hyperpigmented, xerotic showing a small necrotic ulcer. It was non-tender, firm in consistency and not adherent to underlying structures. No regional lymphnodes were enlarged. Routine investigations along with LFT, RFT and serological profiles were within normal limits except that the patient was anaemic with 8.6 gm/dl of haemoglobin (microcytic, hypochromic).

Figure 1. Clinical photograph showing well circumscribed, large swelling of size 6x5 cm seen over the posterior aspect of left mid-thigh.
Clinical impression was Giant Acrochordon with secondary infection. The whole mass was excised and sent for HFR.

Gross specimen (Fig.2) consisted of a skin covered polypoidal mass measuring 5.5x4.5x4cm. The cut surface (Fig.3) was solid, firm, grey-white with areas of brown-black pigmentation. The overlying skin was ulcerated and necrotic.

Histopathological examination of the biopsy specimen, stained with Hematoxylin and Eosin (Fig.4), showed islands of basaloid cell proliferation, with peripheral palisading and stromal separation, connection of tumor lobules with the under surface of the basal layer of the epidermis. The cells were oval to spindle shaped, with moderate pleomorphism and hyperchromasia. Mitotic figures were around 1-2/HPF. The basal layer showed an increase in melanocytes. Melanin pigment was present within some of the lobules. Occasional horn cysts were noted. Surgical margins were free.

Toluidine blue staining (Fig.5) showed mast cell infiltration.

Clinical follow-up of the patient till date was uneventful.

**DISCUSSION**

Basal cell carcinoma first described in 1827 by Jacob, is the most commonly encountered cutaneous malignancy. It arises from the basal cell layer of the epidermis and adnexal structures. BCC comprises 65% of all malignant skin tumors. BCCs are more common in males, and tend to occur in older people. Most BCCs are slow-growing, relatively non-aggressive tumors, a
minority have an aggressive behaviour with local tissue destruction and rarely, metastasis². BCC may occur anywhere on the skin, but more than 80% are located on the sun-exposed skin of the face and neck, with less than 1% of the cases located on unexposed areas⁵. The clinical presentation of BCC can be quite variable. It may be a papulonodular lesion with a poorly translucent edge, an ulcerated destructive lesion (rodent ulcer), a plaque with variable induration, an erythematous plaque with visible telangiectasia, or a partly cystic nodule⁶. Up to 27 different types of BCCs have been described histologically². The histological subtype of the tumor is said to be another factor in the development of GBCC and some histological subtypes have been associated with an aggressive course. Accordingly, GBCCs can be grouped as non-aggressive i.e. nodular and superficial subtypes and aggressive i.e. morpheaform, micronodular and metatypical². Randle and associates found that about 72% of all GBCCs were either micronodular or infiltrative. The classification made by the World Health Organisation, which is currently used, is the one most acceptable from the point of view of simplicity and good reproducibility. This classification contains the nodular, superficial and infiltrative types. Furthermore, it sets apart the micronodular, fibroepithelial, metatypical and keratotic types. The pigmented type differs from the nodolulcerative type only by the presence of pigmentation, which varies from blue through tan, brown or black depending on the number of melanocytes and the amount of melanin present within the tumour. Most BCC are less than 1 cm in diameter. According to the American Joint Committee on Cancer⁷, GBCC is defined as a tumor with a diameter larger than 5 cm. Only 1% of all BCCs achieve this size.

GBCCs are infrequently reported in the literature, representing a quite rare oncological entity. Only occasional case reports are usually published. According to Betti et al., the occurrence rate is approximately 0.5%-1% out of all types of BCCs. According to Archontaki M et al.⁵, who analysed 51 cases of GBCC, the primary sites of GBCCs were the back (14 patients, 27.5%), the face (12 patients, 23.5%), and upper extremity (7 patients, 13.7%). In the remaining cases, the tumor was located on the abdominal wall (3 patients, 9.8%), on the scalp or genitalia region (2 patients, 5.9%) as well as on the anterior chest wall, lower extremity or scapula region (1 patient, 3.9%). The causes of GBCC are not clearly defined. Sahl et al. regard neglect as the primary cause of GBCC resulting in continuous growth of the tumor over a period of 10 to 20 years. It is usually reported among people with a poor socioeconomic status, physical or psychiatric disability that impedes judgment or access to health care providers. One of the most important differential diagnosis considered was trichoepithelioma, which was ruled out by the presence of stromal separation, atypia and mitoses⁹. Optimal management of GBCC consists of wide local excision with histologically confirmed tumor-free margins, frequently followed by adjuvant therapy.

**CONCLUSION**

GBCC tumour behaves aggressively and needs to be recognised and treated early with adequate margin of clearance (probably at least 2.5-3 cm) to reduce the risk of recurrence. Because of the high risk of recurrence and metastasis, previously treated patients need long-term follow-up for life.

**REFERENCES**

Conflict of interest :- Author have none to declare.
Source of funding :- None

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