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CASE REPORT

Pigmented Basal Cell Carcinoma – A Case Report

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ABSTRACT

Basal cell carcinoma is the most common of all skin cancers and the most prevalent one among Caucasians [1]. Pigmented basal cell carcinomas comprises 6% of all the basal cell carcinomas [2]. We report here, a case of pigmented basal cell carcinoma in a 74 year old female.

Key Words: Basal cell carcinoma, pigmented

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examination revealed a single well-defined hyperpigmented plaque measuring about 1cm to 1.5cms, on the right cheek [Table/Fig 1]. The oral mucosa was normal. There was no regional lymphadenopathy. Routine blood investigations were within normal limits. Wide excision of the plaque was performed.



(Table/Fig 1) Pigmented plaque on the right cheek

Introduction

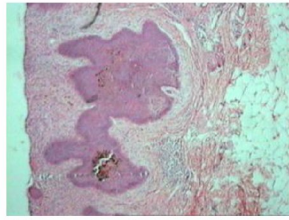
Basal cell carcinoma first described in 1827 by Jacob [3], is the most commonly encountered cutaneous malignancy. It arises from the basal cell layer of the epidermis and adnexal structures. Basal cell carcinoma comprises 65% of all malignant skin tumours [3],[4],[5].

Case Report

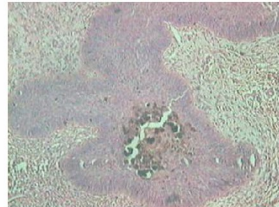
A 74-year-old woman presented to us with a 10 year old single pigmented plaque on her right cheek. She had first noticed a 5mm asymptomatic pigmented papule on her right cheek 10 years back, following trauma. There was increase in the size of the lesion for the last one year and this was associated with itching. There was no previous history of any environmental or occupational exposure to arsenic, radiation or PUVA therapy. There was no family history of skin cancer.

On general physical examination, the patient was found to be healthy. Cutaneous

Histopathological examination of the biopsy specimen, stained with Hematoxylin and Eosin stain, showed islands of basaloid cell proliferation, with peripheral palisading [Table/Fig 2]. The cells were oval to spindle shaped, with mild to moderate pleomorphism and hyperchromasia. The basal layer showed an increase in melanocytes and melanin deposition in the upper dermis and marked pigmentation in the tumour cells [Table/Fig 3]. The melanin pigment was confirmed by positive Fontana-Masson staining.



(Table/Fig 2) Microphotograph showing islands of basaloid cell proliferation with peripheral palisading (hematoxylin and eosin stain; magnification X100)



(Table/Fig 3) Microphotograph showing marked pigmentation in tumor cells (hematoxyline and eosin stain; magnification X 400)

Discussion

Basal cell carcinoma (BCC) is the most commonly encountered cutaneous malignancy. It arises from the basal layer of the epidermis and the adnexal structures [3]. The prevalence increases greatly with exposure to sunlight [6]. Pigmented Basal Cell Carcinoma has all the features of the basal type, and in addition, a brown or black pigmentation is present. These are extremely slow in evolving [2].

BCC may occur at any age, but more than three quarters of patients are over 40 years and this is compatible with the age of our patient. Ninety five percent of these neoplasms occur in patients over the age of 60 years, although cases in childhood and congenital basal cell carcinomas have been reported [3],[4],[5].

BCC may arise in skin damaged by sunlight, ionizing radiation, burn scars [7] or vaccination scars [8],[9]. Basal Cell Carcinomas caused by arsenic ingestion, are often of the pigmented basal cell variety and occur frequently on the trunk [2]. Our patient did not show any of the above characteristics, except for the presence of the plaque on the sun exposed area. Hematoxylin - Eosin stained sections of the biopsy specimen revealed an increase in

melanocytes and melanin deposition in the basal layer, apart from the islands of basaloid cell proliferation, with peripheral palisading. Melanocytes proliferate within the tumour and the melanin that they produce, causes the tumour to be pigmented and numerous melanophages collect in the stroma [10].

The pigmented type differs from the noduloulcerative 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 [10]. Pigmented basal cell carcinomas have been reported to arise within a verrucous naevus [11].

We report this case of pigmented basal cell carcinoma because of its rarity. Awareness of this clinical variant is helpful, not only in the diagnosis, but also in the management of the tumour.

References

- [1]. Shoji T, Lee J, Hong SH, Oh CH, Kim WK, Bhawan J. Multiple pigmented basal cell carcinomas. *Am J Dermatopathol* 1998; 20 (2): 199-202.
- [2]. Odom RB, James WD, Berger TG. Epidermal Nevi, Neoplasms and cysts. In: *Andrews Diseases of the skin. Clinical dermatology: 9th ed.*, Philadelphia. W.B. Saunders Company 2000. p 820-9.
- [3]. Markey AC, Lane EB, Macdonald DM, Leigh IM. Keratin expression in basal cell carcinoma. *Br. J Dermatol* 1992; 126 (2): 154-60.
- [4]. Lesueur BW, Silvis NG, Hansen RC. Basal cell carcinoma in children: report of 3 cases. *Arch Dermatol* 2000; 136: 370-2.
- [5]. Roudier Pujol C, Auperin A, Nguyeu T, Davillard P, et al. Basal cell carcinoma in young adults : not more aggressive than in older patients. *Dermatology* 1999; 199: 119-23.
- [6]. Miki Y. Basal cell epithelioma among Japanese. *Australas J Dermatol* 1968; 9 (4): 304-13.
- [7]. Burns DA, Calnan CD. Basal cell epithelioma in a chronic leg ulcer. *Clin Exp Dermatol* 1978; 3: 443-5.
- [8]. Hendricks WM. Basal cell epithelioma arising in chicken pox scar. *Arch Dermatol* 1980; 116: 1304-5.
- [9]. Rich JD, Shesol BF, Harne DW III. Basal cell carcinoma in a small pox vaccination site. *J Clin Pathol* 1980; 33: 134-5.
- [10]. Mackie RM. Epidermal Skin Tumors. In: *Champion RH, Burton JL, Burns DA,*

Breathnach SM, editors. Rook Text Book of Dermatology, 6th ed, Volume 2. Oxford: Blackwell Science, 1998, p. 1679-85.

[11]. Haris TT. Skin cancer in sunny Queensland. Br. J. Surgery 1976; 29: 61-7.