

A Case Report On Basal Cell Carcinoma: Noduloulcerative Variety

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Abstract

Basal cell carcinoma is the most common Non-Melanoma Skin Cancer (NMSC). There is no precursor skin lesion for basal cell carcinoma. It commonly infiltrates locally and rarely metastasizes. Metastasis is associated with advanced patient age and neglected large lesions. However resection of primary site before the appearance of metastasis gives wonderful results that is presented in this case of Noduloulcerative type of basal cell carcinoma.

Keywords: Non-Melanoma Skin Cancer, Rodent ulcer, Rotational Flap, MOHS

1.Introduction

Basal cell carcinoma is the most common Non-Melanoma Skin Cancer.[1] It is low grade, locally invasive carcinoma arising from basal layer of skin or adnexal basal layer of hair follicle or mucocutaneous junction.[2] It does not arise from mucosa. It is the commonest (70%) malignant skin tumour. It is more commonly seen in white skinned people than blacks. It is common in places like Australia where exposure to UV light is more. It is common in middle aged and elderly men. Prolonged exposure to arsenic, coal tar, aromatic hydrocarbons and skin tumour syndromes are the other causes. In 80 percent of all cases, basal-cell cancers are found on the head and neck. There appears to be an increase in the incidence of basal cell cancer of the trunk in recent years.[3]

2. Case Report

71 years old female patient, a housewife came to our OPD with chief complaints of ulcer with peripheral nodules above the right eyelid for 5 months. (Figure 1) It was associated with pain at the local site. As per her past history, she had a black mole over the same site for 7 years. Initially the mole was a pea-nut size and gradually increased up to the presenting condition. The centre of the ulcer was having cheesy discharge. Patient was hypertensive for last 10 years and she was operated for tubal ligation 30 years back and right eye cataract extraction 2 years back.

Figure 1: Presentation in our OPD



Figure 2: Wide Excision with 1 cm margin



Vitals and general examination were normal on presentation. On local examination, 3x2.5 cm size oval shaped ulcer with peripheral nodules was found. The surface of the ulcer was irregular with beaded edge and depth of the ulcer highest in the centre. (Figure 1) The base was formed by roof of right orbit and right frontal bone. No similar swelling or ulcer was found elsewhere in the body. No regional lymphnodes were enlarged in this patient. There was no sign of metastasis. All routine investigations CBC, Biochemistry, Chest X-ray and USG Abdomen were normal. Histopathological diagnosis of wedge biopsy was suggestive of basal cell carcinoma. Patient was operated by wide excision with 1 cm circumferential margin (Figure 2) and was covered by full thickness skin graft harvested from forehead (Figure 3). The donor site was then covered with rotational flap. (Figure 4)

Figure 3: Graft bed after wide excision



Figure 4: Full Thickness Grafting & Coverage with Rotational Flap

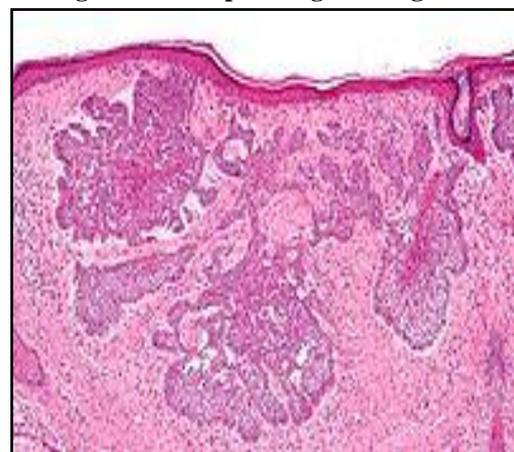


Patient was discharged on postoperative day 7 after suture removal. (Figure 5) The Excisional biopsy section in H&E stain shows characteristic histomorphologic features of peripheral palisading, myxoid stroma and artefactual staining suggestive of Basal cell carcinoma. (Figure 6)

Figure 5: Post Operative Day 7



Figure 6: Histopathological Diagnosis



3. Discussion

Basal cell carcinoma is the most common (70 %) malignant skin tumour. The common site is face – above the line joining the angle of mouth and ear lobule (90% cases), known as Onghren's line.[2] It is also called as tear cancer because it is seen in the areas where the tears roll down. It commonly infiltrates locally and rarely metastasizes. It does not spread through lymphatics or through blood. But it erodes deeply in to the local tissues including cartilages and bones causing extensive local destruction, hence the name 'Rodent Ulcer'. [2]

3.1 Aetiopathogenesis

Risk factors include skin type 1, red or blonde hair, blue or green eyes, freckling in childhood, sunburn in childhood, family history of skin cancer, immunosuppressive treatment and ingestion of arsenic.[4] Several genetic conditions are associated with the risk of developing basal cell carcinoma. These include albinism, xeroderma pigmentosa, Bazex's syndrome, and the naevoid basal cell carcinoma syndrome (Gorlin's syndrome).[4] They also have an increased risk of developing other skin cancers, such as malignant melanoma and

squamous cell carcinoma, and possibly non-cutaneous malignancies.

3.2 Types of Basal cell carcinoma[2]:

1. Nodular 2. Ulcerative / Noduloulcerative 3. Cystic/ Nodulocystic 4. Pigmented 5. Basisquamous 6. Geographical or field fire type 7. Multiple, associated with syndromes and malignancies

Our case is a nodulo-ulcerative type and can be categorized in high risk basal cell carcinoma.

3.3 Criteria for high risk basal cell carcinoma[2]:

1. >2 cm size 2. Near the eye/nose/ear 3. Ill defined margins 4. Recurrent tumours 5. Immuno-suppressed individuals

The tumour is radio-sensitive. Radiotherapy is not a choice if the tumour invades cartilages, bones or it is near the vital structures like eye as in our case.

3.4 Treatment options for basal cell carcinoma[4]

- **Surgery:** Excision with primary closure, flaps, grafts, and secondary intention healing.
- Curettage and cauterization.
- **MOHS: (Microscopically Oriented Histographic Surgery)[2]:** The name was given from American Surgeon Federic E Mohs. It is useful to get the clearance margin and in conditions like basal cell carcinomas near eyes, ear and nose, to preserve more tissues. It is becoming popular in basal cell carcinoma, dermatofibrosarcoma protuberans and melanoma. Procedure is done by plastic surgeon along with histologist. Under local anaesthesia, saucerized excision of primary tumour is done and quadrants of specimen are mapped with different colours. Specimen is sectioned from margin and depth by histologist and it is stained with haematoxylin & eosin. It is studied by MOHS surgeon or histologist. Residual tumour from relevant mapped area is excised and procedure is repeated until clear margin and clear depth are achieved. Clearance must be complete and proper to prevent recurrence.
- Radiotherapy
- Cryotherapy
- Photodynamic therapy

- Topical fluorouracil
- Topical imiquimod

Topical agents used in the treatment of superficial BCC include the following[5]:

- Topical 5-fluorouracil 5%: May be used to treat small, superficial BCCs in low-risk areas
- Imiquimod: Approved by the US Food and Drug Administration for the treatment of nonfacial superficial BCC
- Tazarotene: Can also be used to treat small, low-risk BCCs

Avoidance of exposure to UV radiation is encouraged to prevent basal cell carcinoma (BCC). Helpful preventive measures include carefully planning outdoor activities before 10 am and after 4 pm, wearing a broad-brimmed hat during outdoor activities, and using sunscreens with sun protection factor of 30 or higher.[6]

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