Case Report

# WIDE LOCAL EXCISION AND SPLIT SKIN GRAFT FOR PREAURICULAR NODULAR BASAL CELL CARCINOMA INVADING THE PINNA

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**ABSTRACT**: In the extirpation of basal cell caranoma there is a great risk of insufficient excision leading to recurrence and deeper invasion. This is a case report of a 72 years fair skinned lady who presented with nodular basal cell carcinoma. The lesion had started as a small painless nodule in front of the right tragus one year ago. At the time of presentation it had already invaded the right pinna. Biopsy revealed it to be the nodular variant of basal cell carcinoma. Keeping in view the histological type and patient's wishes wide local excision of the lesion was planned and carried out. The resultant defect was covered by a split skin graft. The lesion was completely eradicated and the skin graft gave an excellent cosmetic result.

KEY WORDS: Basal Cell Carcinoma (BCC). Wide local excision. Split Skin graft.

## INTRODUCTION

Basal Cell Carcinoma (BCC) does not metastasize but it is locally malignant. It invades the neighboring structures and destroys them by erosion, hence its name "rodent ulcer'. Since the tumour usually occurs on the exposed parts

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of face, head and neck, if unchecked the tumour can cause horrific disfigurement.<sup>3</sup>

### CASE REPORT

A 72 years, elderly, fair skinned lady presented with complaint of a slowly growing painless nodule that started one year ago. The nodule appeared in front of her right tragus. The nodule was followed by crops of nodules in the skin around the initial site. At the time of presentation the right pinna had been invaded and destroyed. The lobule of the right ear had virtually disappeared. However there was no pain. The patient was otherwise in good health. The biopsy of the lesion revealed nodular variant of a basal cell carcinoma. This type of BCC has the best prognosis.

Keeping in view the nature of the lession, its extent and the patients wishes, wide local excision with a margin of 5 mm to 10 mm was planned and carried out. The resulting wound was covered by split skin graft harvested from the patient's right thigh. The surgery produced



Figure 1: Pre-operative presentation of pre-auricular nodular basal cell carcinoma



Figure 3: Excellent colour match of split skin graft and no recurrence after 6 months

excellent tumour eradication and cosmetically satisfactory skin match. There was no recurrence in one-year follow up.

#### DISCUSSION

The incidence of basal and squamous cell carcinomas is on the rise. It is rising at an

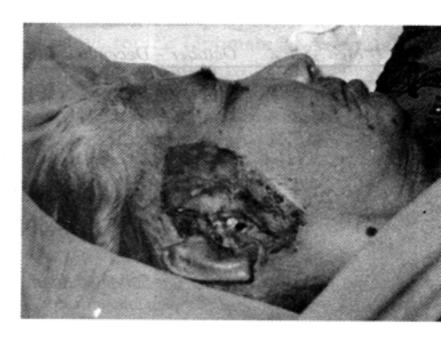


Figure 2: First post-operative view after 1 week of tumor excision and split skin graft

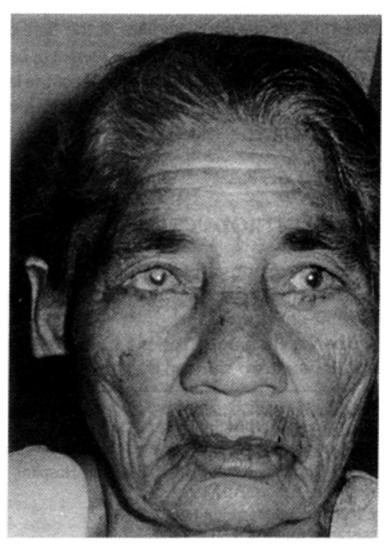


Figure 4: Anterior view of patient after 6 months

alarming rate of 2-3% annually. The ratio of basal to squamous cell carcinoma is 4:1 with age at detection decreasing. BCC affects fair skinned persons, exposed to sunlight. Sun exposure is the main risk factor. Ultraviolet-B is the primary carcinogen in sunlight with ultraviolet-A acting as a cofactor. Genetic conditions such as basal cell naevus syndrome and

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xeroderma pigmentosa predispose to skin cancer. 1.5 Previous radiotherapy, arsenic exposure and immunosuppressed states are also linked to the genesis of the skin cancer. 1

Eighty percent (80%) of basal cell carcinomas are of nodular variety and have best prognosis. 1,4,6 Morpheaform 10% and superficial multicentric, pigmented and baso-squamous variants making up the remainder. 1,4,5,6 The morpheaform variety resembles a scar and has finger-like projections making the margin definition difficult. The superficial spreading looks like an eczematous patch without deep invasion. The pigmented BCC is often confused with melanoma and needs biopsy for definite diagnosis. The baso-squamous variant resembles both basal and squamous cell carcinomas and behaves intermediate to both the types. 4

Treatment options include electrodessication, topical 5- flurouracil, cryosurgery, Moh's surgery, wide local excision and radiotherapy. Moh's surgery and wide local excision are reserved for advanced tumours. Advanced basal cell carcinomas (BCC) sometimes require excision of critical aesthetic units( eg. eye lids, nose, lip, pinna). The surgeon's choice of margins in the resection of BCC is the critical factor in tumour eradication. The literature defines two situations: small well defined tumours and larger, ill defined tumours 6 Koplin and Zarem7 attempted to review the literature. They concluded that 2 mm margins were adequate for smaller well defined tumours and that 3 to 4 mm margins would be adequate for the treatment of larger or ill defined tumours.

When planning surgical excision, reconstruction should also be kept in mind. Options for reconstruction include: primary closure, skin grafting, secondary intention local flaps and free tissue grafts. However care must be taken to avoid complex reconstructions in patients who are at high risk for recurrence in order to avoid 'burrying' the recurrences.

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