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Case Report

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Basal cell carcinoma of nose

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ABSTRACT

Basal cell carcinoma (BCC) is the most common type of skin carcinoma. It is usually observed in older patients, especially in those frequently and intensively exposed to ultraviolet radiation during their lives. The most typical site is uncovered skin directly exposed to the sun. The lower eyelid is the most common site, other sites being head, face, neck and limbs. A standard surgical excision is considered a good treatment option for all BCCs arising on the face with 5 year recurrence rates of anything up to 10% providing adequate margins are taken. A 3 to 5 mm margin is recommended for standard surgical excision. Reconstruction can be done with the help of various flaps.

Keywords: BCC, Nasal reconstruction, Nasolabial flap, UV (ultraviolet) radiation

INTRODUCTION

Basal cell carcinoma (BCCs) is the most common type of skin carcinoma. It constitutes approximately 75% of non-melanoma skin cancers. It is usually observed in older patients, especially in those frequently and intensively exposed to ultraviolet radiation during their lives. The most typical site is uncovered skin directly exposed to the sun.[1] The lower eyelid is the most common site, other sites being head, face, neck and limbs. The incidence is about 2000 cases per 100000 population, more common in males and in old age group. It grows slowly and can damage the tissue around it but is unlikely to spread to distant areas or result in death. It can occur with UV exposure, history of radiation treatment or exposure to arsenic or industrial chemicals.

It typically presents as a painless raised area of skin, which may be shiny with small blood vessels running over it or it may present as a raised area with ulceration. It can present as a red patch similar to eczema or as a skin thickening or scar tissue. The actively growing tissue is at the periphery of the lesion, with cellular apoptosis and resultant ulceration in the central region. To treat these lesions, it is important to eradicate the farthest marginal areas because these tend to have the most aggressively behaving cells. Growth may continue for months or even years, gradually invading and destroying bone as well as soft tissues. There is a predilection for invasion along tissue planes, the periosteum, and nerves. A common theory states that the embryonic fusion planes, such as the nasolabial fold, are more susceptible to tumor growth.[2]

Clinical subtypes

Nodular: Large tumor nodules, generally circumscribed.

Superficial: Multicentric, grows laterally with high recurrence rate.

Infiltrative/ morpheaform: Angulated narrow tumor nests growing in infiltrative manner at leading edge, high recurrence rate with more risk of perineural invasion.

Basosquamous: BCC plus admixed focal SCC, more aggressive than classical BCC, may metastasize.

Basal cell nevus syndrome (Gorlin's syndrome): Autosomal dominant with multiple BCC, palmar pits,

Dural calcification, keratin cysts of jaw, skeletal abnormalities.[4]

Surgical techniques

Wide local excision with 5-10 mm margins; Mohs micrographic surgery: tumors with diameter above 2 cm or with unclear borders or with aggressive histological signs; Curettage with or without electrodesiccation: tumors with diameter from 2 to 5 cm; cryosurgery: small sized and well-defined BCC with clear borders.

Medical management

Topical 5-fluorouracil: nodular-ulcerative and superficial BCC.

Imiquimod: Single primary superficial BCC, size from 0.5 to 2 cm diameter.

Radiation: Total dose of 60-70 Grey tumors up to 5 cm.

Photodynamic therapy: Single or numerous superficial or morpheaform BCC.

Laser treatment: Superficial BCC.

CASE REPORT

A 70 year old female patient presented with chief complaints of lesion on the tip of the nose since 7-8 months. The lesion was non-painful, insidious in onset, grew gradually to the present size. There was no history of trauma, fever or lesions at any other sites. No history of UV exposure, history of radiation treatment or exposure to arsenic or industrial chemicals was noted. There was no history of recent loss of weight. Patient was a recently diagnosed hypertensive on medication. No similar swellings elsewhere in the body were found. Lesion was 1.5×1.5×1 cm in size, round, pearly, flesh coloured papule with rolled (raised) borders and blood vessels over the surface. There was no discharge from the lesion. No pulsations or bruit were seen over the lesion.

Figure 1: 1.5×1.5×1 cm size lesion over the tip of nose.

Figure 2: Lesion removed with 0.5 cm margin.

DISCUSSION

Diagnosis was done with the help of tissue biopsy. It was diagnosed as BCCs. It showed basaloid cells with scanty cytoplasm and elongated hyperchromatic nuclei, peripheral palisading, peritumoral clefting and mucinous alteration of surrounding stroma.[5]

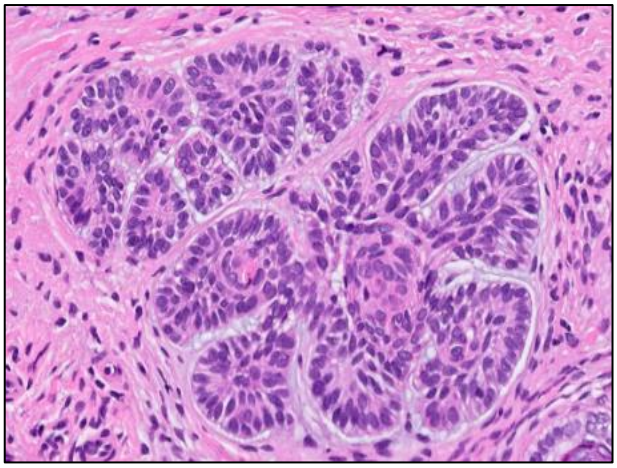

Figure 3: Histopathology slide.

Figure 4: Tumour removed with clear base.

Patient was advised surgical management. Lesion was removed en bloc with 5 mm margins all around. Rotation flap was taken and sutured to cover the raw area. Histopathology showed dermis contained islands of basaloid cells with peripheral palisading, elongated nuclei with few scattered mitotic figures. Overlying epidermis, excised base and margins were found to be free of tumor. Special attention must be paid to the location of the BCC on face as there are many areas of functional and cosmetic importance for example the periocular, perioral, and perinasal areas. In general, standard surgical excision is considered good treatment option for all BCCs arising on face with 5 year recurrence rates of anything up to 10% providing adequate margins are taken. A 3-5 mm margin is recommended for standard surgical excision.[3]

Figure 5: Rotation flap for reconstruction.

Figure 6: Post-operative photo.

Reconstruction of the nose

Nasolabial flap: The superiorly based nasolabial flap is useful for defects of the nasal sidewall, ala, and tip, while the inferiorly based nasolabial flap is useful for defects of the upper and lower lip, nasal floor, and columella. The blood supply to this flap is excellent due to perforating branches of the facial artery. The color and texture are excellent matches, while the donor site scar is acceptable in the nasolabial sulcus.[6]

Subcutaneous V-Y flap: Sliding, subcutaneous V-Y flaps for the reconstruction of nasal defects have been gaining in popularity, especially in nasal dorsum reconstruction. The flaps have also been used in ala nasi reconstructions, for defects generally limited to less than 1.5 cm in diameter and not involving the rim. The advantages are having similar tissue in the same operative field, with an excellent blood supply.[7]

Bilobed flap: It is a useful and time-honoured technique for reconstructing defects of the nose, especially defects of the lower third of the nose. The bilobed flap is appropriate for partial-thickness losses of less than 1.5 cm of the lateral aspect of the nose, ala, and tip area.[6,8]

Midline forehead skin flap (seagull flap): It can serve as a cover for any nasal reconstruction from severe tip and ala loss to a total nasal defect. Using this flap, aesthetic and functional reconstruction can be achieved by creating a nose that blends well with the face. The seagull-shaped flap is based on one of the supratrochlear vessel bundles.[9]

CONCLUSION

Prognosis is excellent if the appropriate method of treatment is used in early primary BCCs. To treat these lesions, it is important to eradicate the farthest marginal areas because these tend to have the most aggressively behaving cells. A 3-5 mm margin is recommended for adequate removal of the lesion. Despite the slow progress and numerous therapeutic methods, it should not be underestimated. Reconstruction can be achieved with rotation flaps and wound can be closed primarily. Recurrent cancers are much harder to cure.

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