Case Report

Large Basal Cell Carcinoma over Face reconstructed with rotational flap; an experience in a District level hospital.

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ABSTRACT

Basal cell carcinoma (BCC) is the most common form of skin cancer. BCC in the head and neck usually presents as a slow growing well defined papule or nodule located above the line connecting the angle of the mouth and ear lobe. It is locally destructive lesion and cause serious disfigurement but metastasizes rarely. Various treatment are available out of which surgical excision is the most standard option. Surgical excision of tumors from the face may create a defect that is difficult to restore. Skin grafts can only cover superficial defects and has a natural tendency to contract and may not take properly. Also, because of the color mismatch, it is not cosmetically identical to the face. The use of regional flaps such as rotational cheek flap can be a very good option for the reconstruction of a moderate to large cheek defect. Herein, we report a case of large BCC over the face for which rotational cheek flap reconstruction was carried out at Modernized Sadar Hospital, Chapainawabganj.

Introduction

Basal cell carcinoma is derived from the non-keratinizing cells originating from the basal layer of the epidermis. BCC generally has a clinical course characterized by slow growth, minimal soft-tissue invasiveness, and a high cure rate. Occasionally, however, BCC behaves aggressively with deep invasion, recurrence, and potential regional and distant metastasis. BCC commonly occur over the face and rarely do over the limbs and trunk [1]. Surgical techniques such as standard excision, Mohs micrographic surgery, curettage with electrodessication and cryotherapy are employed to prevent recurrences. [2] Surgical excision of tumors from the face may create a defect that is difficult to restore. Skin grafts can only cover superficial defects and has a natural tendency to contract and may not take properly. Also, because of the color mismatch, it is not cosmetically identical to the face. The use of regional flaps like rotational flaps are very useful and versatile local flaps, with robust vascularity that can be readily elevated to cover a large defect

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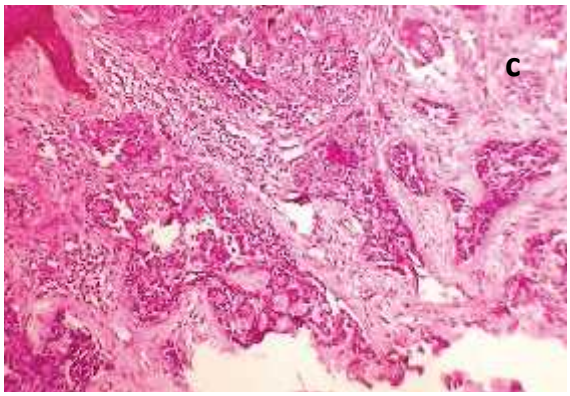
Case Presentation:

76-year-old man, presented with a single, dark ulcerated plaque over the Right upper medial cheek for 2 years with a history of blood discharge from the lesion since 3 month. There were no similar complaints in the family. On examination revealed a large 5 cm × 4.5 cm single,hyperpigmented, ulcerated plaque with undulating margins and rolled out edges [Figure A]. Incisional biopsy taken from the lesion revealed small geographic lesion composed of small round, basaloid cells proliferation. The cells showed mild anisonucleosis, atypical mitosis and peripheral palisading consistent with BCC [Figure C].



After initial diagnosis, the patient underwent surgery about two months later and presented the lesion involving nearly total right lower eyelid [Figure D].The lesion was subjected to wide local excision with 3 mm margin [Figure E] followed by rotational cheek flap reconstruction. After excising the lesion, the incision optimally placed in parallel to the melolabial crease to subcilliary line. Extending the lateral incision slightly higher than the lateral palpebral fissure allows the incision to be hidden in the crow's feet wrinkles and provides added support to the lower eyelid when the flap was transferred. From this lateral extension, the incision curves inferiorly to the Preauricular crease. Once the incision reached the lobule of the ear, it carried a little down to the neck [Figure F]. The flap elevated in the subcutaneous tissue plane with preservation of the subdermal plexus [Figure G]. As the significant pivotal and advancement tissue movement was required, the resulting standing cutaneous deformity was excised [Figure H]. The defect then closed primarily with 3/0 vicryl and 4/0 prolene [Figure I]. Histopathology of the excised specimen was consistent with BCC without perineural involvement and remarked as cleared margin.

Discussion:

BCC is the most common skin cancer in white individuals. Similar to other non-melanoma skin cancers, its incidence is rising. Recently, the incidence of BCC has been increasing among Asians, and the overall number of BCC cases has been growing rapidly. The nodular, superficial spreading and infiltrating variants are the three most commonly encountered types of BCC in descending order of prevalence. [3] The clinical characteristics of BCC appear commonly on the head and neck areas, and the most common subtype of BCC is the histopathologically distinct nodular type. It has been suggested that intermittent sun exposure may be an important etiology.BCC on the face may have a higher degree of subclinical spread than tumor's arising elsewhere. In general, the cosmetic outcome

for standard surgical excision is felt to be good, but having to remove large lesions with adequate excision margins can be disfiguring as a result of loss of tissue, grafting and subsequent scarring. [4] Special attention must be paid to the location of the BCC on the 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 a good treatment option for all BCCs arising on the face with 5year recurrence rates of anything up to 10% providing adequate margins are taken. A 3to 5 mm margin is recommended for standard surgical excision.

While it would seem sensible to take larger margins at the sites where subclinical spread is known to be more extensive, these sites are all of great cosmetic and functional importance and therefore striking the correct balance is necessary.[5] In our case wide local excision with 3 mm margin, was carried out to prevent recurrences. Rotational cheek flap was designed as these flaps have an excellent blood supply from subcutaneous tissue and ideal for use on the face since secondary revisions are rarely required. They are superior to other flaps, which may leave dog ears, skin grafts, which are depressed and shiny and primary closure where tension is present. The only complications are loss of edge of flap from too much tension and hair loss over that area[6].

Conclusion:

Reconstructing large (greater than 3 cm) medial cheek defects presents a greater challenge to the surgeon specially when the lesion involving more than one aesthetic unit. This lesion involves the eye, nose and cheek aesthetic unit of the face. Reconstruction can frequently be accomplished by transferring the lateral cheek skin medially in the form of a rotation flap. Rotation flaps are pivotal flaps with a curvilinear border. Larger medial cheek cutaneous defects repaired with lateral cheek skin are usually reconstructed with local flaps that exhibit both pivotal and advancement movement in order to maximize the transfer of skin from the margins of the posterior cheek and superior neck. It is usually too necessary to excise a large standing cutaneous deformity in or parallel to the melolabial crease. Herein, we report a case of BCC occurring on face and reconstructive surgery performed to restore the defect after wide local excision.

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