

Split paramedian forehead flap for medial canthal reconstruction

Sir,

Reconstruction of the eyelids, especially the large full thickness defects, is one of the greatest challenges faced by the head and neck surgeons. A wide range of surgical approaches are used to repair the eyelids depending on the size, location, and extent of defect.^[1-4] The aim of reconstruction of any eyelid defect is to supply a stable movable lid ensuring adequate corneal protection and at the same time providing a good aesthetic quality at the donor site. We present an interesting case in which we split the paramedian forehead flap, thus providing two axially perfused skin flaps for simultaneous reconstruction of the upper and lower lid structures following resection of basal cell carcinoma of the right medial canthal area.

A 74-year-old man presented to us with a complaint of an asymptomatic ulcer located in the right medial canthus and the adjoining fronto-nasal region for a year [Figure 1]. The 3 × 2 cm ulcer was of insidious onset and gradually increased in size; it was well demarcated and had a black pigmented crusted surface. His visual acuity and eyelid movements were normal. The family history, physical examination of the draining lymph nodes, and other organ systems were unremarkable. An incisional biopsy from the lesion was suggestive of a basal cell carcinoma. Surgical resection of the lesion was performed with 5-mm margin including the lacrimal apparatus [Figures 2a and b]. A left-sided supratrochlear and supraorbital artery-based paramedian split forehead island flap was elevated and transferred to the defect. The donor site was closed

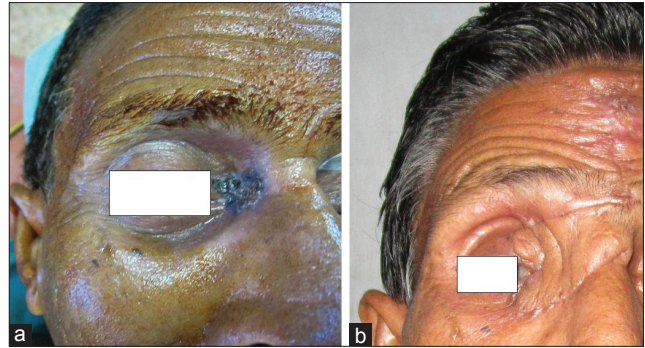


Figure 1: Clinical photograph of the patient (a) Prior to surgery (b) 2 months post surgery showing a satisfactory result

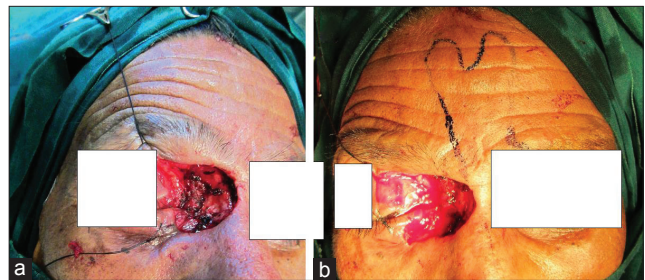


Figure 2: Intraoperative photographs of the patient showing (a) Resultant defect following wide excision (b) Marking of the split paramedian forehead flap

primarily. The final histopathology confirmed the lesion as a basal cell carcinoma with tumor-free margins. Except for mild epiphora of the right eye, the patient is disease free over about a year post surgery.

Composite reconstruction of medial canthal defects is technically challenging because of the highly specialized anatomy and function of the lids. Local advancement flaps of either the anterior or posterior lamella are not suitable for such complex reconstructions because of the limited amount of adjacent tissues and the limited arc for rotation. Median or paramedian forehead flaps and its modifications have been widely used to reconstruct the nasal and medial canthal areas and are still versatile tools for the reconstruction of the fronto-nasal area.^[1-4] The split paramedian forehead flap is one such modification. The advantages of split paramedian forehead flap are a wider arc of rotation and suitability of splitting due to the axial vascularity. The donor site can be primarily closed without a marked scar. A potential disadvantage of using the forehead flap is the bulkiness of the flap; this could be overcome by careful perioperative debulking of the flap. We found split forehead flap to be a favorable option for simultaneous reconstruction of the upper and lower eyelid defects, a satisfactory result can be obtained both functionally and cosmetically.

Arvind Krishnamurthy

Department of Surgical Oncology, Cancer Institute (WIA), Chennai, Tamil Nadu, India. E-mail: drarvindkrishnamurthy@yahoo.co.in

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