

The Tailored Forehead Flap in Aesthetic Reconstruction of Nasal and Periorbital Defects

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Abstract

The tailored forehead flap is an innovative technique described by our group. In this technique, we avoid the use of skin graft for the donor defect on the forehead. As a result of technique modification, the aesthetic outcome is good with little postoperative deformity. The learning curve is short and this technique could be useful for moderate size defects of the nasal dorsum and periorbital areas after excision of local BCC lesions. Flaps are generally required when 2 or more subunits are affected [1].

Keywords: aesthetic forehead flap; innovation; technical nuances

Introduction

The forehead flap is a common flap that is useful for correcting several deformities of the upper face. Over the years, we have suggested some useful modifications in order to provide better aesthetic outcomes. The procedures have been modified by creating a smaller recipient defect so that we can avoid a skin graft for the donor area. It has a short learning curve and is easily reproducible by younger plastic surgery trainees. The vascularity of the flap is good and necrosis is uncommon [2].

Methods

Using concise measurements of the defect and flap, the flap is raised in usual fashion at the level of the galea and at about 2 cm above the supraorbital notch, the flap is raised at a subperiosteal level [3]. The tumor excision defect is narrowed with PDS suture leaving a smaller defect. The Forehead flap is tailored to this and inserted. Division of the flap is after 21 days. The technique is useful for moderate sized defects. We do not recommend this technique for locally advanced disease [4].

Results

We use a 5mm margin which is generally sufficient for the tumor (BCC). There has been no recurrence after 1 year, in all our cases (9-10). The concise measurements provide a predictable outcome for most cases.

Discussion

The tailored forehead flap has several advantages in that it is not only easy to learn, but has predictable aesthetic outcomes, without serious complications like infection or necrosis [5]. Not using a skin graft over the donor defect enhances the overall aesthetic result. The flap has a good blood supply and offers excellent color match. Our innovative tailored flap involves minimal dissection and has minimal postoperative deformity. It is suitable for moderate sized defects which does not involve the majority of subunits of the nose, and also peri orbit areas. It offers a user-friendly technique that can be reproducible by trainee surgeons, with acceptable aesthetic outcomes.







Figure 1: Before and after image of the tailored forehead flap in an adult pt with BCC.

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