ADAPTABLE NASAL RECONSTRUCTION WITH AN AXIAL FOREHEAD FLAP

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INTRODUCTION

Historically, the Indian method of nasal reconstruction with forehead flaps and Tagliacozzi's arm flap methods are two of the earliest described procedures in the specialty that was to become plastic surgery. Now, extensive nasal defects are more likely due to ablation from tumor than from trauma. But despite the miraculous advances in our field, complex nasal defects—large nasal surface areas missing with underlying structural and/or lining defects—remain one of the toughest challenges in modern plastic surgery.

THE PROBLEM

An 81-year-old woman presented with a basal cell carcinoma on the tip of her nose that had been ignored for 20 years. The tumor had largely destroyed her nasal tip, including much of both alae, a portion of the dorsum, and the anterior septum. It was fixed to the nasal lining. The patient was referred to the Mohs' dermatologist, who removed the tumor with a multitude of choices regarding both treatment and reconstructive options at an extremely vulnerable and anxious time in their lives. Complicating the decision is the inevitable disagreement among physicians as to the best modality for surgical treatment and/or the need for adjunctive radiation or chemotherapy. The additional option of breast reconstruction compounds the choices faced by the patient, her general surgeon, and her plastic surgeon.

The decision between synthetic implant and autogenous tissue is made more difficult by the issue of immediate or delayed reconstruction. The plastic surgeon must educate the patient and general surgeons about the different alternatives available and their relative advantages and disadvantages. A good cancer operation should be discussed within the context of the patient's reconstructive potential. The key element in surgical decision making is to tailor the procedures more closely to the exact reconstructive needs of each individual patient.
THE PROBLEM

The patient is a 51-year-old woman who underwent right breast lumpectomy and radiation to treat an infiltrating ductal carcinoma. The treatment left her with a breast that appeared distorted with a laterally displaced nipple-areola complex (Figure 4.1a-b). She presented with a new primary carcinoma in her left breast (lobular carcinoma in situ) and a modified radical mastectomy was planned. The patient wanted to have the mastectomy as soon as possible, with reconstruction of both breasts. A bilateral transverse rectus abdominis myocutaneous (TRAM) flap was selected. However, the patient expressed concern about the demands of immediate reconstruction, with time lost from work and the need for blood availability. The procedure was adapted to her particular requirements for bilateral reconstruction with one previously irradiated breast.

The patient underwent a left skin-sparing mastectomy using the modified Wise (inverted “T”) pattern skin excision. A total submuscular textured tissue expander was placed at the time of her initial surgery. The use of the expander enabled the preservation and expansion of her skin envelope until such time as the autogenous tissue reconstruction could be per-

Figure 4.1.(a,b)  This 51-year-old woman underwent right breast lumpectomy and radiation to treat an infiltrating ductal carcinoma. The treatment resulted in a distorted-appearing breast with a laterally displaced nipple-areola complex.