Nasal tip sutures: how to control shape and orientation in rhinoplasty

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Nasal tip surgery is universally recognized as the most challenging part of the rhinoplasty procedure. “The tip makes the nose”. Narrowing the anatomically complex alar cartilages can lead to functional and aesthetic unfavourable outcomes. A thorough understanding of the ideal surface aesthetics and contours and spatial relationships of the structures of the nose tip is mandatory. In primary rhinoplasty, a very large percentage of visible tip deformities involve two major areas: the domes and the lateral crura. Suture techniques have the potential to modify the position, shape and definition of the tip. However, even sutures may result in changes beyond the main goals for which they are placed. The final suture effects are influenced by factors such as forces intrinsic to the cartilages, the degree of suture tightening, and limitations posed by the soft-tissue attachments. The closed delivery approach is our favourite. In a step-by-step fashion, first the medial pillar of the tripod should be addressed, establishing stable and strong tip support and basic dome projection symmetry. Subsequently and in our experience, in a standard procedure shaping lateral crura and domes, using reversible techniques that preserve structural integrity of the rimstrip, would be advisable. One of the main goals is not only to narrow the tip but to change the angle of rotation of the lateral crus surface in relation to the sagittal upper septal margin. Once marked the new dome defining point, with a variable combination of the lateral crural steal technique, sutures such as cranial tip sutures (CTS) and hemitransdomal sutures (HTS) might produce the needed outcome of everting and rotating the caudal margin of the lateral crura above the cranial edge. These sutures can gradually increase domal convexity and reduce lateral crura convexity. Additional dome equalization suture can guarantee more symmetry and then one or more lateral crural spanning sutures help in achieving supplementary eversion of the lateral crus. After establishing adequate projection, the tip rotation or position sutures are placed between the cranial edge of intermediate crura and the dorsal septum. The personal association of suture techniques is presented in this study and the long-term subjective and objective results are discussed along with the pros and cons.

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