

Closed Rhinoplasty With an Intercartilaginous Midmarginal Incision

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In septorhinoplasty, one of the most critical points is to reestablish the support for the nasal tip damaged by surgery. This can be achieved by suturing the nasal structures to each other. We describe our incision and suturing technique for closed rhinoplasty, which provides wide exposure and adequate nasal tip support.

Key Words: Closed rhinoplasty, intercartilaginous midmarginal incision

Two basic approaches are used to suture the tip of the nose: the closed technique and the external approach, or open technique. Open versus closed rhinoplasty has been a controversial subject for several years,¹ and both methods have advantages and disadvantages. Although the open technique provides wide exposure, a columellar incision scar results, and thus, some surgeons prefer the closed technique, particularly in primary rhinoplasty.

Four common incisions are used for closed rhinoplasties: intercartilaginous, transcartilaginous, infracartilaginous, and bipedicle incisions. With the closed approach, no columellar incision scar results, but the exposure is poor compared with the open technique. The indications for each approach depend on the specific anatomy of the nose and the surgical plan.² This article describes our closed rhinoplasty incision and suturing technique for a wide exposure and for reconstructing the damaged tip support between the medial crural footplate and caudal border of the quadrangular cartilage.

METHODS AND MATERIALS

Our cases are performed under general or local anesthesia with intravenous sedation. Nasal packs soaked with 4% cocaine are placed in the nasal cavity for further anesthesia and hemostasis. The surgical field is prepared and draped in the standard fashion for rhinoplastic procedures. Then, in all cases, 1% lidocaine with epinephrine 1:100,000 is injected submucosally to reduce any bleeding and provide local anesthesia. A bilateral incision is made with a no. 11 scalpel between the upper and lower lateral cartilages as an intercartilaginous incision and is extended to 2 mm from the caudal border of the septal cartilage as a midmarginal incision (Fig 1). After the appropriate surgery for the dorsum and tip of the nose, we put 1 or 2 permanent sutures (with 5.0 Prolene) between the caudal border of the septum and posterior half of the medial crus of the lower lateral cartilages (Fig 2). The mucosal incisions are then sutured. After completing the procedure, intranasal

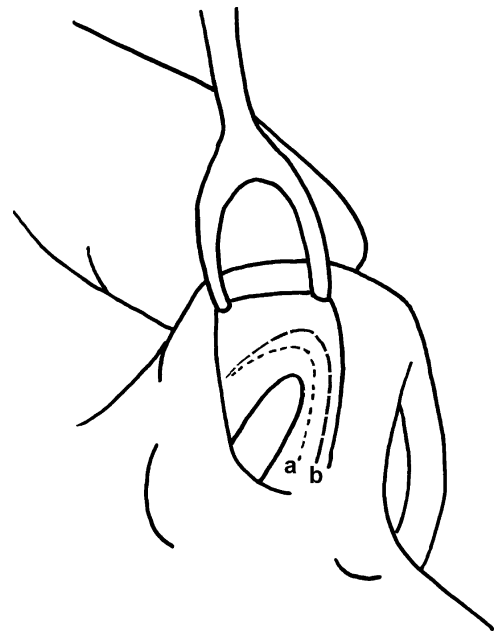


Fig 1 Intercartilaginous midmarginal incision.

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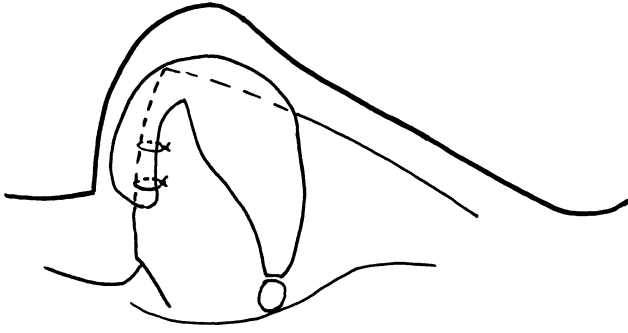


Fig 2 Suturing technique for reconstructing the tip support.

silicon splints and external thermal splints are applied and held in place for 1 week.

DISCUSSION

Rhinoplasty, which seeks to improve the function and appearance of the nose, has recently become more popular due to increasing aesthetic expectations. The endonasal approach was first described in 1891, and several variations have been developed since that time.² No one technique is best for all noses. In determining the choice of incision, the surgeon must consider the possible long-term distortion created by the incision itself.

A successful rhinoplasty depends on nasal tip support and its influence on nasal tip projection. When accessing the nose for reconstruction in rhinoplasty, some of the nasal tip support is damaged. Sacrificing the tip support will lead to an underprojected nose, and if the surgeon does not pay attention to this and does not reconstruct the

tip supports, the operation will be unsuccessful in the long term.³

The objective is to create a clearly defined stable and properly projecting tip. For this purpose, we put a permanent suture between the caudal septum and posterior half of the columella that reestablishes the damaged medial crural footplate attachment to the caudal border of the quadrangular cartilage during surgery. This suture allows powerful tip projection and minimal cephalic tip rotation and prevents caudal rotation and long-term tip depression.

This suturing technique was first described by Tebbets for open rhinoplasty,⁴ and no description of this method for closed rhinoplasty exists in the literature. Traditional incisions do not allow the use of this suture technique in the closed technique. The critical point of the midmarginal incision is to obtain exposure between the columella and caudal septum to allow them to be sutured to each other in the closed rhinoplasty technique.

In summary, this method seems to be safe for preserving the nasal tip support in closed rhinoplasty. This technique is easy to use, and the results are dependable.

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