



Postoperative Instructions – Choanal Atresia Repair

Choanal atresia is the absence or only partial development of the choanal openings in the posterior nasal cavity. This atresia is usually a bony plate but occasionally can be just mucus membrane. The choanae open into the nasopharynx to allow passage of nasal mucus and air. Because newborns are obligate nasal breathers (always want to breathe only through the nose), congenital narrowing or complete blockage of the choanae may cause respiratory distress. This problem requires surgical intervention by either stretching any existing opening or creating an opening by removing the blocking bony plate or mucus membrane.

To minimize the degree of postoperative scarring and narrowing of the choanae, a stent (made from endotracheal—or breathing—tubes) is placed in each nostril and remains for three to eight weeks. Each stent is secured to the other by a strong continuous suture, which is tied in front (see figures 1, 2 and 3).

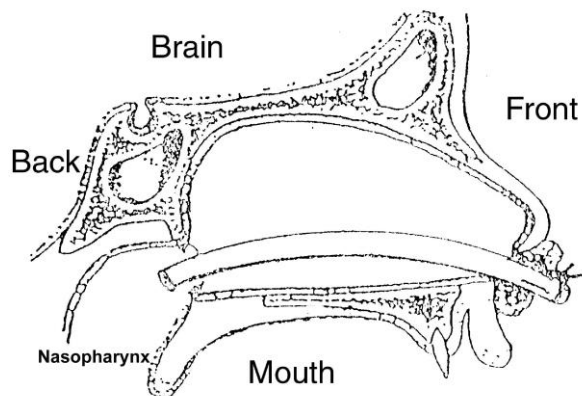


Fig. 1: Stents displaced anteriorly (to the front) for cleaning

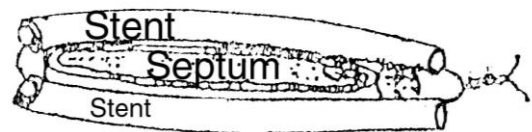


Fig. 3: Axial (top) view

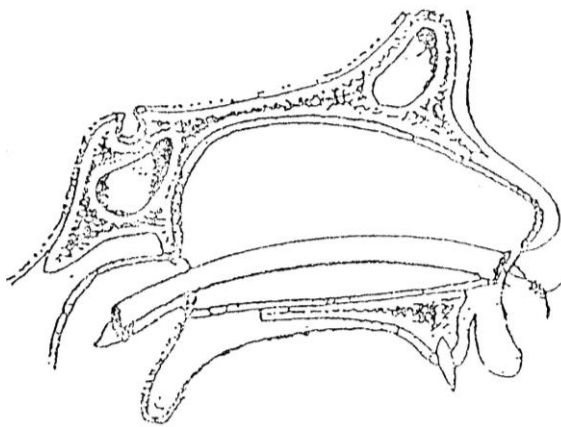


Fig. 2: Proper stent position

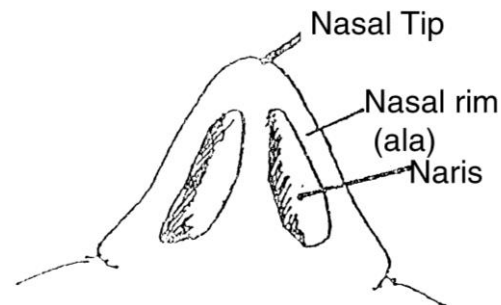


Fig. 4: Base of nose view



Stent Care

- Each stent should be suctioned every two to three hours to ensure patency and removal of debris.
- Use nasal saline drops to break up debris. Suction with the appropriately sized nasotracheal suction that will fit the stent. Bicarbonate solution (1%) may also be used to decrease mucus plugging.
- Suction to a depth of at least 6 cm.
- If you are unable to pass suction, gently grasp the suture and stents and pull to displace the stents anteriorly (figure 1). This may help dislodge the mucus. Clear the stents as above.
- After suctioning, replace the stents by pushing on each one. The ends of the stents must not lie against the nasal rim (alar). See figure 2 for proper placement.
- Slight bleeding is expected initially after cleaning the stent. Excessive bleeding should be brought to the attention of the surgeon.
- Notify the surgeon if you notice any skin integrity breakdown along the nasal rim (alar).

For after-hour emergencies, call 317.944.5000 and ask for the ENT resident on call.

Ear, Nose & Throat

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