Lateral Nasal Wall Collapse as a Contributor to Nasal Obstruction

The internal nasal valve (INV) is the narrowest area inside the nose and it is bounded by the cartilages on the sidewall of the nose, the inferior turbinate (radiator-like structure inside the nose that warms up the air) and the septum (the wall that divides the nose from right to left). Anything that affects any of these 3 components will cause nasal obstruction. For example, allergies and cold weather make the turbinates swell-up, a deviated septum causes anatomic blockage of the area and weakness of the cartilage causes collapse of the sidewall of the nose.

There are different options to address weakness of the sidewall of the nose:

1. **Nonsurgical:**
   Breathe Right strips or Nasal Cones can be used to stent open the nostril and support the sidewall. These offer temporary relief. A trial of 2 weeks usually recommended for these before jumping to a surgical procedure. If there is improvement, patients will likely benefit from a more permanent surgical correction.

2. **Surgical:**
   a) Alar Batten grafts: A piece of cartilage is harvested from the ear or nasal septum, shaped as an oval and inserted under the skin inside the nose. There are additional risks when ear cartilage needs to be harvested. These include infection of the skin and ear cartilage, auricular hematoma (blood clot under the ear skin), through-and-through skin defect on the ear, and pain. Benefits include long-lasting results, validated technique and minimal risk of extrusion or rejection because it is an autologous material.

   b) Suspension technique: an incision is made on the cheek under the eye and a permanent suture is looped around the area of the sidewall where the nose pinches inward while breathing and tunneled under the facial skin. The suture is anchored to the bone on the face using a screw. This technique is best used in men for cosmetic reasons because it can result in asymmetry between the two sides of the nose, a small facial scar and a “flared” appearance of the nostrils.

   c) Latera implants: absorbable nasal implant made of poly lactic acid (material used to make sutures) is placed under the skin of the sidewall of the nose. The implant is anchored to the nasal bones and provides cantilever support to sidewall of nose when the patient breathes in. The implant gets absorbed by the body over time inducing fibrosis (scarring) of the tissues on the sidewall which then stiffens it. The implant can be placed in the operating or in the office.
with local anesthesia. The outcomes at 18 months are comparable to alar batten grafts. The main risks are infection, implant extrusion or migration, foreign body reaction or allergic reaction to the implant and change in the external appearance of the nose.

Post Operative Instructions after Repair of Lateral Wall Collapse:
1. Do not pinch or blow your nose for at least one week after surgery
2. Avoid moving your nose from side to side, wrinkling your nose or any aggressive, unnecessary manipulation of nose
3. Do not perform any strenuous activity for at least one week after surgery
4. Cough and sneeze with your mouth open
5. Do not place any foreign objects in nose, including but not limited to tissue, Qtips, etc. unless instructed by your doctor
6. Avoid wearing glasses for one week after surgery