

Chapter 2. Framework: Cartilaginous Support

- The cartilaginous framework of the nose is composed of paired upper and lower lateral cartilages that extend out from the end of the bony pyramid. Each pair of cartilages has a distinctly different shape (Figure 2-1).
- The upper lateral cartilages are relatively flat and form the caudal sidewalls of the nasal pyramid. The medial border of each lies against the septum in the midline. The lateral border rests near the piriform aperture within the sidewalls of the nose. Their angle with the midline septum forms the internal nasal valve.
- The lower lateral cartilages have a more intricate structure. They are curved strips that bend around the alar rims and function to maintain competence at the external nasal valve (Figure 2-2). Each is composed of three parts, or crura.
 - The medial crura approximate each other at the midline within the substance of the columella.
 - The middle crura rest within the nasal tip. The angle between the medial and middle crura is roughly 20% to 25%.
 - The lateral crura are relatively flat compared to the middle and medial portions. They flare out within the substance of the columella. The two nasal domes are separated from each other by 3 mm to 4 mm and an angle of 70 degrees to 80 degrees. From the lateral genu, the lateral crura generally parallel the alar rims along the anterior third. They then diverge posteriorly at a 30- to 45-degree angle.¹
- There are several ways in which the upper cartilages attach to their lower counterparts. Most commonly, the caudal edges of the upper cartilages form a scroll or clasped-hands connection with the cephalic edges of the lower cartilages. The two edges may also simply adjoin one another and rarely, they may overlap one another.¹
- The midline cartilaginous septum divides the interior of the nose into two vestibules (Figure 2-3). It is composed of hyaline cartilage anteriorly and bone inferiorly and posteriorly. It forms a central structure onto which the superior border of the upper lateral cartilages rest. Beneath the septum lies the vomer, while posteriorly it joins the perpendicular plate of the ethmoid. Its caudal margin has a defined posterior septal angle, a middle septal angle, and an anterior septal angle. These angles are important in the definition of the nasal tip.
- Smaller sesamoid cartilages and dense fibrous tissue lie between the lateral crus and the piriform aperture.

REFERENCE

1. Daniel RK. The nasal tip: Anatomy and aesthetics. *Plast Reconstr Surg.* 1992;89:216.

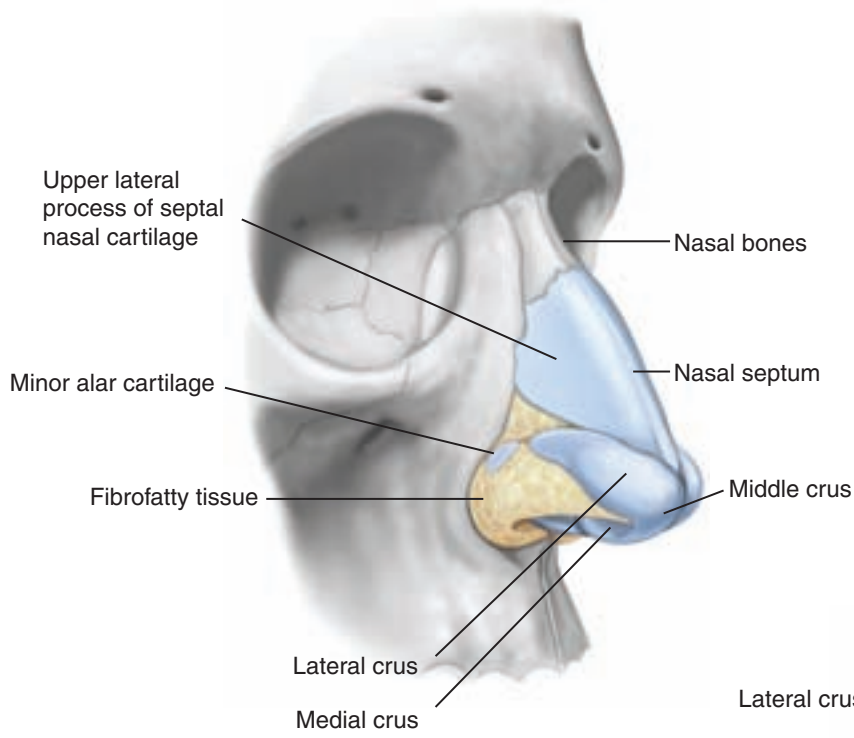


Figure 2-1. Nasal cartilages.

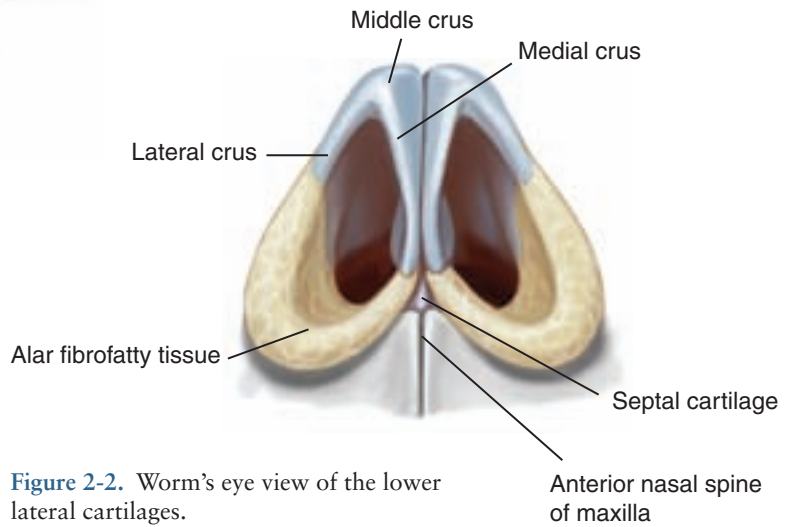


Figure 2-2. Worm's eye view of the lower lateral cartilages.

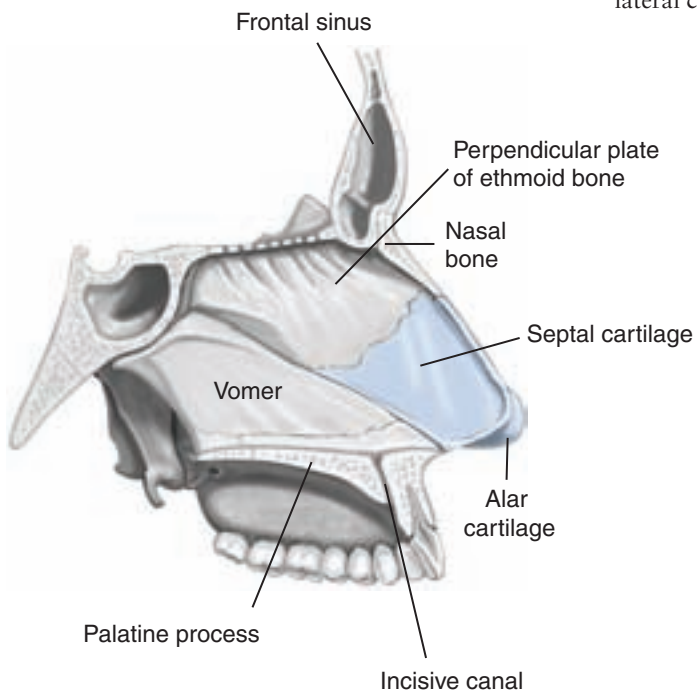


Figure 2-3. Lateral position of the nasal septum.