

## The subperichondrial /subperiosteal dissection in Preservation Rhinoplasty: How histology can help us to perform better surgeries

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**Aim:** The classical dissection plane in rhinoplasty is in the sub-SMAS plane with traumatic dissection of tissues and as a result significant and prolonged postoperative edema, especially in the external approach. A complete subperichondrial/periosteal route has been recently described. It seems to allow for simpler postoperative follow-up than external or closed approach performed in the sub-SMAS plane. However, little is known about the exact histological planes that are really dissected during surgery.

**Material and methods:** Histological examinations of 10 cadavers noses dissected in the so-called subperichondrial/subperiosteal plane were performed.

**Results:** The subperichondrial plane is truly subperichondrial and consists in a dissection under the chondrogenic layer of the perichondrium. Subperichondrial dissection necessitates sharp scrapping to separate the cartilage from the chondrogenic layer. The perichondrium is naturally thicker on the dorsum, which explains why it is easier to begin the dorsal dissection at the W point. Scroll cartilages are consistent and show between 9 and 13 isolated cartilages, most of the time, 1 major and several minors cartilages. Optimal strategy to ease the dissection is discussed

**Conclusions:** The subperichondrial/subperiosteal route, although necessitating significant dissection of the teguments of the nasal pyramid, is respectful of the anatomy of the nasal pyramid. It allows minimal traumatic maneuvers than in the sub-SMAS route, despite of the large dissection performed.

**Keywords:** preservation rhinoplasty, dissection, histology