The importance of upper lateral cartilages, following humb reduction. An algorithm for nasal dorsum reshaping.

Background: When we perform humb reduction in primary rhinoplasty we need to pay special attention to the upper lateral cartilages. Failing to restore the proper position of the upper lateral cartilages could result to aesthetical and functional problems.

Methods: The notes of 112 patients who had primary rhinoplasty were reviewed and analyzed and the complications and revisions were recorded. The dorsal aesthetic lines were analyzed for symmetry.

Results: Humb reduction was performed in all patients. A dorsal reduction of 3mm or more was performed in 70% of the patients. The mean follow up was 2 years. The techniques used for dorsum reshaping were: Spreader flaps in 45% of the patients, spreader grafts in 20% of the patients, reapproximation of the upper lateral cartilages in 30% of the patients and in 5% of the patients tension spanning sutures were used. 5% of the patients required revision. 95% of the patients had symmetrical dorsal aesthetic lines and they all had very good breathing function.

Conclusions: An algorithm is proposed in order to achieve symmetrical dorsal lines after removal of the dorsal humb. This involves 4 different techniques depending on the size of humb removal and the individual anatomy of the upper lateral cartilages. The proposed algorithm could provide satisfactory long lasting results both functionally and aesthetically.