Commentary on: Anatomical Study of the Lateral Crural Strut Graft in Rhinoplasty and its Clinical Application

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Over the past two decades a variety of grafts have paved the way to great strides in the field of rhinoplasty surgery.\textsuperscript{1-5} The versatility of lateral crural strut grafts makes it one of the most valuable grafts in the armamentarium of today’s rhinoplasty surgeon. It may be used to reposition, reshape, or reconstruct the lateral crura in primary and revisional operations.\textsuperscript{1} Its utility may also assist in the correction of alar rim retraction.

The current study was conducted to provide clarity in the clinical application of lateral crural strut grafts.\textsuperscript{6} In this commendable effort, the authors assessed nasal anatomical changes after the use of lateral crural strut grafts in cadavers. Although lateral crural strut grafts have been previously analyzed,\textsuperscript{1,7-10} theirs is the first to provide statistical analysis of objective data that support its benefits.

One limitation of this study is that about 94% of the cadavers used were either African-American or mixed races, while only one was white. The authors commented that African-Americans may present with alar malposition when compared with other ethnicities. However, they also tend to have a lack of prominence of the nasal spine, thick skin and fibrofatty subcutaneous tissue, excessive alar flaring, a wider alar base, increased interalar width, and more flaccid lower lateral cartilages.\textsuperscript{11-14} These are characteristics that could affect the results obtained from the measured variables, basilar nasal width, interalar width, columella-nasal tip height, and nostril width. While respecting the difficulty in obtaining cadavers for research, a larger group of patients from a more diverse background would have provided data that are more indicative of what is to be expected when lateral crural strut grafts are use in the general population.

Much has been written to fortify the value of lateral crural strut grafts, but the associated complications have not been statistically analyzed through objective data. Although problems like infection, warping, pain, and swelling would not be possible to document in this study, other factors such as malpositioning, undercorrection/overcorrection, and asymmetry could have been evaluated. For example, a notable effort was made to obtain key measurements, and nostril asymmetry was essentially assessed through the evaluation of individual nostril cross-sectional area and nostril width. However, asymmetry was not elucidated in this endeavor.

The present study aimed to assess the clinical applications of lateral crural strut grafts using objective data. The authors faced an impressive challenge since these grafts are almost uniformly used in conjunction with several other techniques and/or grafts. Their method did include transdomal and interdomal sutures, which along with other common maneuvers, collectively determine the final anthropometric dimensions. Lateral crural strut grafts may have more or less effect on the lower third of the nose depending on the adjunctive procedure. For instance, when operating on African-American noses I often use lateral crural strut grafts in addition to a lateral crural steal technique. These patients can have a widely divergent angle at the middle curve.\textsuperscript{12} The aforementioned combination helps to increase tip definition by moving the domes medially and projecting into the thick skin.\textsuperscript{12,15}

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Notwithstanding a few limitations, the authors provide us with a study that yields new information, which can be valuable when considering the use of lateral crural strut grafts.

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**REFERENCES**