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EDITOR'S INVITED DISCUSSION

Invited Discussion on: Video-Assisted Septo-Rhinoplasty, the Future of Endonasal Rhinoplasty—A Technical Note

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Abstract
This discussion critically evaluates the paper "Video-assisted septo-rhinoplasty, the future of endonasal rhinoplasty—A Technical Note." This discussion recognizes the substantial advantages offered by the novel endoscopic technique, such as improved visibility and the facilitation of surgical teaching. However, it also explores the inherent obstacles including potential restrictions in achieving full visibility of all nasal structures, a steeper learning curve for young surgeons due to the need to master endoscope manipulation, and difficulties in precision and accuracy during suture and graft placements in the confined operational field. This discussion underscores the importance of surgical adaptability as well as tailoring techniques to meet the specific anatomical and esthetic considerations of each patient. Even as the limitations of the endoscopic method are highlighted, its potential for advancing the field of rhinoplasty is affirmed. The inventiveness and dedication of the original authors are applauded, and we look forward to their continued innovation in this rapidly evolving discipline.
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The manuscript under review, "Video-assisted septo-rhinoplasty, the future of endonasal rhinoplasty—A Technical Note [1]," presents an engaging and innovative perspective on the current practice of rhinoplasty. The authors share their methodology and hands-on experiences with video-assisted endoscopy, advocating for it as a plausible solution to address the disadvantages encountered in the conventional open technique. We acknowledge the significant advancements presented here, but also recognize potential limitations and areas for further exploration.

We would like to emphasize the strengths evident in this study. The authors adopt a thorough and methodical approach in deciphering the video-assisted endoscopic rhinoplasty procedure. The authors' advocacy for dorsal preservation techniques and ligament repair is particularly noteworthy. This focus on preserving the supportive ligaments and cartilage structures signifies their commitment to uphold surgical best practices and promote superior postoperative outcomes.

Among the highlights of this paper, the authors' precise and comprehensive depiction of the endoscopic auto-spreader flaps technique deserves particular appreciation. They have ingeniously adapted this technique as an alternative to navigate the complexity of placing spreader grafts endonasally, thus preserving the internal valve function—a key determinant impacting the postoperative quality of life for patients. This approach not only manifests their surgical expertise but also testifies to their commitment to improving patient outcomes.

While the study presents substantial strengths, it is equally important to examine areas that invite critical discussion. In the spirit of constructive critique, we will explore potential weaknesses within the study. The endoscopic technique is essentially a closed approach enhanced by the advantages of direct visualization. The authors have chosen to contrast the endoscopic approach with the open approach. This comparison, while more convenient, reflects an ongoing debate in the field about the superiority of the open versus closed technique—a matter that remains unresolved and largely dependent on case-specific considerations [2]. A more insightful comparison would be against its closer counterpart—the traditional closed approach, which holds many similarities with the endoscopic technique. Evaluating the endoscopic method in relation to the closed approach could provide a more nuanced understanding of its potential benefits, limitations, and scope for refinement.

Examining the drawbacks associated with the closed technique offers a useful perspective for evaluating the endoscopic approach. The main shortcomings of the traditional closed rhinoplasty are as follows: restricted direct visualization of the anatomical structures, more challenging teaching prospects due to lack of clear visualization, and lesser precision and accuracy in suture and graft placement [3].

Addressing the first issue, the endoscopic technique indeed provides enhanced visualization for specific aspects of the procedure. The authors emphasize the pivotal role the endoscope plays not only in visualizing the septoplasty, but also in the successful execution of auto-spreader flaps. This particular capability is a notable advantage over the traditional closed rhinoplasty, where such precision may be more challenging. However, the endoscope does not facilitate aspects of nasal tip surgery. While the endoscope does offer an advantage over the closed approach in terms of visualization, it does not provide a comprehensive view of all nasal structures and their intricate relationships. This full visibility is a crucial element, especially for early-career surgeons, in diagnosing and understanding the root causes of deformities [4].

Turning to the second drawback: teaching difficulties arising from restricted visualization. Here, the endoscope seems to offer a solution, would indeed present a rich resource for educational purposes, making the procedure more teachable. However, this introduces a new challenge: Aspiring surgeons must now learn to manipulate the endoscope to replicate the procedure effectively—a learning curve that could potentially be steep, not to mention that an endoscope may not be available. This proposition invites further exploration to establish its validity.

When considering the third disadvantage—precision and accuracy in suture and graft placement—the endoscopic approach only somewhat mitigates this issue. Working with one hand and within the confined operational field remains a substantial challenge. Even though increased visualization provided by the endoscope offers some advantages, it does not fully compensate for these inherent limitations. This observation is further supported by the authors' own acknowledgment that the placement of spreader grafts proved to be time-consuming and difficult to execute with precision during their procedure. In essence, while the endoscopic technique brings certain improvements, these inherent challenges of the closed approach persist, and a surgeon's skill and adaptability are still tested in these conditions, thus making the learning curve potentially steep.

Indeed, we concur with the authors in their emphasis on the critical importance of preserving the supportive ligaments and cartilage structures during the procedure, as well as repairing the Pitanguy ligament, which is key in stabilizing tip position postoperatively [5]. The authors propose that the endoscopic approach, by virtue of its enhanced visualization, could bolster efforts to preserve these vital structures, thereby potentially improving surgical outcomes. However, it is crucial to acknowledge that a complete subperichondrial and subperiosteal dissection, instrumental in protecting these structures, can also be achieved using the open approach. This has been eloquently outlined and demonstrated in the work of Cakir et al. [6], thereby underscoring that the endoscopic method does not exclusively hold the advantage in this regard.

The authors have embraced the endoscopic technique for all their patients pursuing either functional or esthetic rhinoplasty, demonstrating their faith in the technique's adaptability across a variety of patient requirements. Moreover, they seem to employ spreader flaps universally, likely due to the reported complexity of using spreader grafts with their procedure.

Avashia et al. conducted a survey among a panel of internationally recognized rhinoplasty surgeons about their decision-making process in middle vault reconstruction, examining responses to 24 distinct scenarios with varied management options. One such scenario revealed that weak upper lateral cartilages were considered a relative contraindication to auto-spreader flaps, often necessitating the use of spreader grafts for appropriate midvault reconstruction [7]. Additionally, most panelists acknowledged that in certain scenarios, multiple simultaneous adjunct maneuvers, including septal scoring, buttressing, and differential tied sutures, may be necessary. Accomplishing such intricate tasks under endoscopic visualization may prove challenging due to the one-handed operation, which can impede the ability to stabilize cartilage for precise suturing. The limited workspace for maneuvering under

endoscopic guidance may further compound these challenges.

This potential drawback might limit the procedure's adaptability, making it less able to meet the individual anatomical and esthetic needs of each patient.

From our perspective, the essence of successful surgical intervention lies in the ability to customize each procedure based on the unique anatomical features and esthetic desires of each patient. If a surgical technique, such as the endoscopic approach, places constraints on this individualized approach due to its inherent limitations, then it should not be indiscriminately applied to all patients. Rather, it should be selectively used, taking into account the appropriateness for individual patients based on their unique anatomical characteristics and esthetic aspirations.

In summary, the study, "Video-assisted septo-rhinoplasty, the future of endonasal rhinoplasty—A Technical Note," offers a detailed examination of the endoscopic approach in rhinoplasty. In our discussion, we aimed to assess the endoscopic method in comparison with the traditional closed technique, as they share closer similarities. Through this comparison, we note that the endoscopic technique indeed enhances surgical visualization and teaching prospects, albeit with limitations while introducing new learning challenges. Moreover, it offers enhancements in precision and accuracy over the closed method, yet these advantages do not completely rectify the recognized challenges of the closed technique in comparison with the open approach.

A key insight derived from this discourse is the importance of aligning the chosen technique with the individual patient's unique anatomical characteristics and esthetic aspirations, a factor that may be constrained by the endoscopic method's inherent limitations. Despite the noted drawbacks, the endoscopic technique's benefits should not be dismissed; they simply suggest a necessity for further refinement and selective application.

Despite the critical examination presented here, it is essential to recognize the authors' significant contribution in developing a novel technique. Novelty often invites resistance initially; however, such opposition is essential for fostering improvements and future innovations. We eagerly anticipate witnessing the evolution and refinement of the endoscopic approach over time, which may pave the way for more extensive applications and better patient outcomes in the realm of rhinoplasty. The authors deserve high praise for their inventive approach and their tireless endeavors to deepen our comprehension of this intricate surgical discipline.

Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Human and Animals Participants This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent For this type of study, informed consent is not required.

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