

Title: Pitfall and Complications in Rhinoplasty

Presenter: Beta SN, dr. Sp.BPRE SubSp. E.L. (K)

Background: Rhinoplasty is a highly complex procedure with a notable risk of postoperative deformities, evidenced by revision rates ranging from 5% to 15% even among expert surgeons. Addressing these unfavorable outcomes requires a deep understanding of the surgical pitfalls and material-specific complications that compromise both aesthetics and nasal function.

Scope: This presentation evaluates the spectrum of complications associated with various rhinoplasty techniques and augmentation materials, including nasal threads, synthetic implants (silicone, PTFE, Medpor), and autologous cartilage grafts. It also examines structural and soft-tissue deformities that necessitate secondary surgical intervention.

Findings: Each augmentation approach presents unique clinical challenges. Nasal threads are frequently complicated by dorsal skin thinning and tip indentation, challenges for subsequent rhinoplasty. Synthetic implants carry long-term risks of capsular contracture driven by biofilm formation, late-onset inflammation, and a 2% to 5% extrusion rate, predominantly at the nasal tip. While autologous costal (rib) cartilage remains vital for complex revisions, it introduces its own pitfalls, most notably a warping rate of up to 26.1%, donor site calcification, and the risk of tip skin thinning. Furthermore, structural misjudgments can lead to severe aesthetic deformities, such as alar retraction and pinched noses, while failing to respect the soft tissue envelope can result in catastrophic complications like total columellar necrosis.

Conclusion: Successfully navigating the pitfalls of rhinoplasty demands rigorous preoperative evaluation, including precise donor site analysis and the management of patient expectations. Mitigating severe complications ultimately relies on meticulous surgical technique, careful material selection, and balancing robust structural support with the inherent limitations of the patient's skin envelope.