



Retrospective Analysis of Postoperative Infections in Genioplasty with Silicone Implants

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Introduction

Genioplasty provides remarkable aesthetic improvement for patients seeking facial profile adjustment. No recent literature exists in facial plastic surgery reporting rates of postoperative infection using silicone chin implants.

Background

Chin augmentation is a well-tolerated and rewarding cosmetic/reconstructive surgery.

Uncommon risks:

- Implant extrusion
- Bone resorption
- Unfavorable cosmesis
- Soft tissue infections:
 - Rate infrequently reported
 - Oral maxillofacial literature has reported rate of 5-7%¹
 - No recent literature exists within facial plastic surgery.

Silicone implants are often preferred over materials like porous polyethylene or polytetrafluoroethylene due to its robust fibrotic capsular formation around the implant which facilitates removal if necessary.



Figure 1: Example silicone implants for genioplasty

Methods

- Retrospective clinical chart review from 1998 to 2018 for patients who underwent silicone chin implantation
- No other concurrent procedures were performed locally

Main outcome: postoperative surgical site infections

Postoperative Routine²:

- Antibiotic course as indicated
- Chlorhexidine mouthwash in the morning, after meals, and before bed for 2-3 weeks after surgery

Results

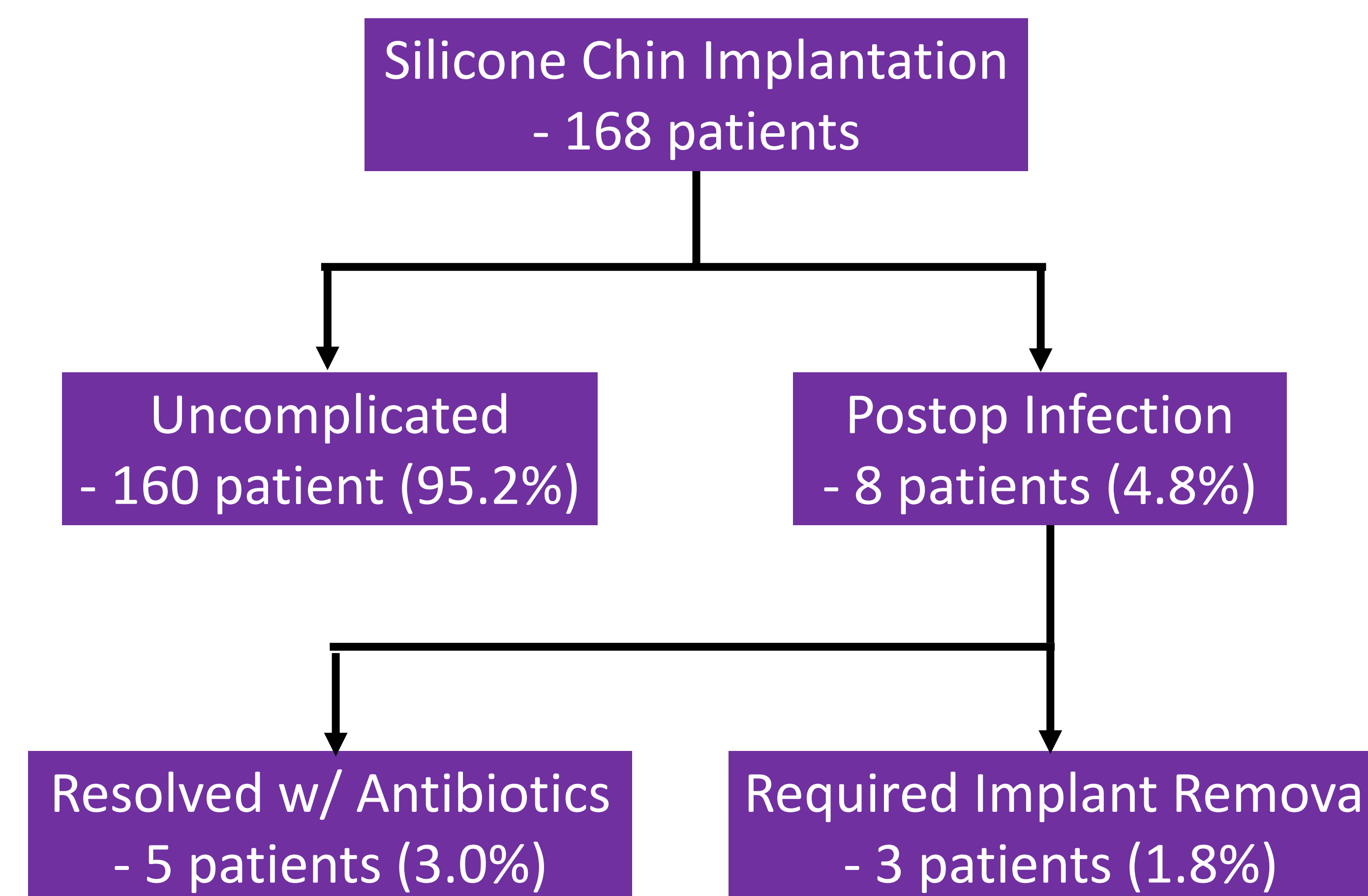


Figure 2: Flow diagram of postoperative infection rates and treatments

Discussion

- Reported postoperative infection rates of silicone implants over a 20-year period
- Help establish risk of complications to guide and inform patients
- Provide additional baseline marker to measure and assess implant site infection rates and interventions that may affect patient outcomes

Conclusion

- Low infection rate of silicone chin implantation from a single group of facial plastic surgeons
- Silicone chin implantation continues to be a safe and well-tolerated procedure for cosmetic and reconstructive purposes.



Figure 3: Sample image of genioplasty outcome

References

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2. Shokri T, Rosi-Schumacher M, Petrauskas L, Chan D, Ducic Y. Genioplasty and Mandibular Implants. *Facial Plast Surg.* 2021;37(6):709-715. doi:10.1055/s-0041-1735307