

## 45 Chin Implant

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### Abstract

Chin implants are a useful method to consistently achieve increased projection of the mentum in the anteroposterior direction. This technique is particularly useful in patients who require >2 mm of projection. The authors prefer using smooth silicone implants placed through a submental approach.

**Keywords:** Microgenia, chin implant, silicone chin implant, chin augmentation

### Key Points

- In women, the chin should be approximately 2 mm posterior to the upper lip line. In men the chin should align with the upper lip line vertical.
- Chin projection is a key component of the lateral facial assessment and can be corrected with fat grafting alone if microgenia is <2 mm, or with a chin implant if >2 mm projection is required.
- Smooth silicone implants are preferable to porous materials (i.e., porous polyethylene).

### 45.1 Preoperative Steps

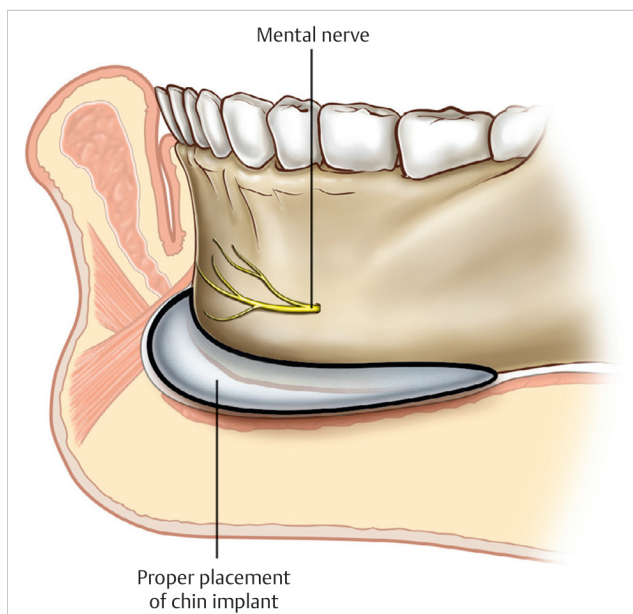
- A detailed medical history and physical are obtained for all patients prior to treatment. Exclusion criteria include: open wounds, active infection, dermatologic conditions, bleeding

disorders, immunocompromised state, or the need for orthognathic correction of the maxillary–mandibular relationship.

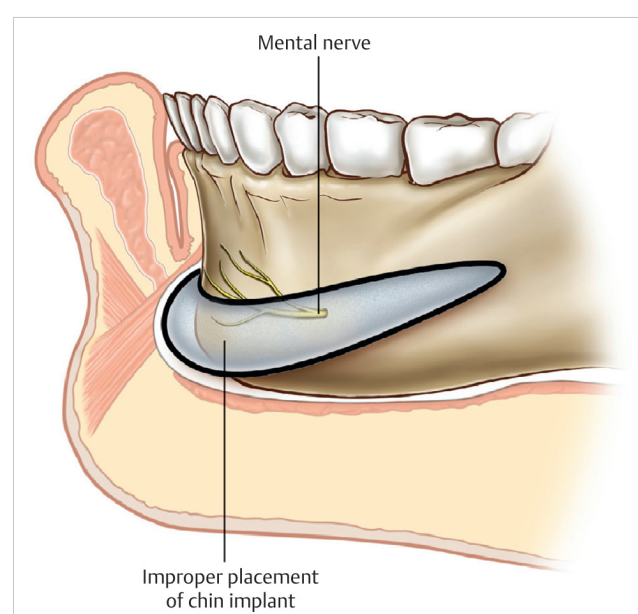
- Consultation with the patient should be used to establish realistic expectations as well as to educate the patient on important perioperative care instructions for optimal results.

### 45.2 Operative Steps (► Fig. 45.1 and ► Fig. 45.2)

- See **Video 45.1**.
- A submental incision is marked and infiltrated with local anesthesia.
- Using a #15 blade, a 2 cm incision is made through the subcutaneous tissue. Next, a periosteal elevator is used to develop a precise subperiosteal pocket for placement of the silicone anatomic chin implant sizer. The area is undermined from the menton laterally along the lateral mandibular border to preserve the mental nerves bilaterally.
- After ascertaining the correct size and projection based upon the preoperative markings and discussion with the patient, the silicone chin implant size/projection is chosen and precisely placed on the menton.
- The implant is stabilized in the midline to the periosteum with a 3–0 Vicryl (Ethicon Inc., Somerville, NJ) suture.
- The mentalis muscle and subdermal area are closed with 4–0 Vicryl (Ethicon Inc., Somerville, NJ) deep interrupted suture.
- The skin is closed with simple interrupted 6–0 nylon sutures.



**Fig. 45.1** Proper placement of chin implant relative to menton and mental neurovascular bundle.



**Fig. 45.2** Incorrect placement of chin implant, showing compression of mental nerve.



**Fig. 45.3 (a–d)** A 22-year-old female with a notable microgenia who underwent a combined rhinoplasty and chin augmentation with a small silicone implant. Postoperative images show improved harmony of the nose–lip–chin.

### 45.3 Postoperative Care

- Patients are instructed to refrain from strenuous activity for 2 to 3 weeks.
- On occasion the chin is taped to maintain soft tissue envelope position and obliterate dead space.

### 45.4 Case Example

A 22-year-old female with notable microgenia who underwent a combined rhinoplasty and chin augmentation with a small

silicone implant. Postoperative images show improved harmony of the nose–lip–chin (► Fig. 45.3a–d).

### 45.5 Conclusion

For patients with microgenia > 2 mm, a chin implant is the procedure of choice to improve projection and harmony of the lower face in both men and women. Precise pocket formation and implant selection are critical to avoid undesirable implant migration and step-offs. Precise reapproximation of the mentalis is necessary to avoid a witch's chin deformity.

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### Further Readings

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