Cohesive Gel Naturally-shaped Breast Implants

According to the author, cohesive gel naturally-shaped breast implants provide particular benefits for patients who prefer retromammary implant placement. He discusses his experience with these implants in 50 patients. [Aesthetic Surg J 2003;23:63-6.]

Currently, cohesive gel naturally-shaped implants are available in the United States only to women involved in studies approved by the Food and Drug Administration. However, practicing in Israel has afforded me the opportunity to gain a fairly significant experience with these devices. I have found that patients feel very comfortable about the safety of cohesive gel implants, because the thick consistency of the gel decreases the risk of gel migration in the event of implant rupture.

For my patients, the primary benefit of cohesive gel naturally-shaped (CN) breast implants is that they eliminate visible shell folds, a problem that occurs frequently with saline solution-filled implants. This is particularly beneficial in patients who would prefer retromammary implant placement, but it may be important in retropectoral devices as well.

Tebbetts1-3 has described that, with the patient in an upright position, the upper pole of a round liquid-filled implant (silicone or saline solution) collapses as the filler material shifts inferiorly.1-3 The correct “filling pressure” of the implants demands this shift. If the filler material could not shift, the implant would be too hard. This shifting of the filler material explains why ripples or shell folds are often visible through the skin. At The Aesthetic Meeting 2001, Hidalgo reported that 25% of saline solution-filled implants had visible wrinkles.4 Even retropectoral placement will not prevent this from occurring.

The CN implant has the advantage of a smaller volume in the superior portion. This implant profile decreases upper pole prominence, thus making retromammary placement an option. Retromammary placement has a number of advantages, including beneficial effects on ptosis. Yet liquid implants, because of the tendency for shell folds, often are problematic for retromammary placement.

I personally use the retromammary placement technique routinely for breast augmentation.

Fifty patients underwent placement of a retromammary CN implant through a 5-cm inframammary-fold incision. CN breast implants from various manufacturers were used. My surgical technique is essentially as described by Tebbetts.1 A bupivacaine/epinephrine solution was injected medially and laterally with a Klein-type needle. The dissection was performed with monopolar cautery; blunt dissection was not used. I was careful to limit pocket dissection to the implant dimensions. Postoperative bras, drains, dressings, and massage were not necessary. Operating time was about 1 hour.

Narcotic analgesics were rarely required for more than 24 hours after surgery. Most patients experienced a return to normal activities of daily living in 1 or 2 days. Patient satisfaction was high, and ptosis was improved. Multiparous patients with ptosis required larger implants to fill their skin envelope.

Results are demonstrated in Figures 1 to 3. Moderate capsule contracture developed in only 2 patients (4%). They declined surgical treatment. No patients demonstrated visible folds. Three patients (6%) demonstrated the late onset of high ripples. This was caused by either “bottoming out” from large implants or by overdissection of the inframammary fold. In general, the shape of the breasts after augmentation was excellent.

CN implants have been associated with the risk of free rotation or asymmetry. In my series, 2 patients (4%) had implant rotation; one early, and one caused by a seroma cavity. Some implants now include “suture tabs” that allow the implant to be sutured to the fascia, thus preventing rotation. Additionally, the implants are now marked with orientation lines to facilitate placement. CN breast implants require extra attention to detail in dissection of the implant pocket. Given proper pocket dissection, implants with greater base width and lower vertical height have less risk of rotation as a direct result of their asymmetry.

A 5-cm inframammary fold incision is required for insertion of CN breast implants. However, rather than
considering this a true disadvantage, one should recognize that the inframammary fold incision is least likely to compromise diagnosis and treatment if breast cancer develops in the future. CN implants are not as soft as gel-or saline-filled implants. However, this was not a problem noted by the patients in my series. In summary, cohesive gel naturally-shaped implants require modifications in technique to achieve optimal results, but they provide significant advantages and flexibility in effectively dealing with specific problems of breast augmentation.

References


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