



Invited Discussion On: Muscle-Splitting Breast Augmentation

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The author presents a long-term follow-up regarding his experience with the muscle-splitting breast augmentation technique with over 1500 patients. He demonstrates a technique with acceptable complication rates and benefits. The noted capsular contracture rate (1.2%) is lower than the quoted capsular contracture (1.3–30%) [1]. One possibility for the author's lower contracture rate is the prominent usage of textured implants.

Drain usage in the presented article also appears high (5.3% and 7.5% in primary and revision cases, respectively). The majority of plastic surgeons have abandoned the use of close-suction drains during primary mammoplasty. In our practice, we typically will only use drains if there is concurrent liposuction of the axilla/lateral chest wall in which there is communication with the breast implant pocket. There was no mention of rationale why the author used drains or the presence of simultaneous liposuction.

When first described [2], the subpectoral approach was developed to alleviate the visibility of the implant. With longer follow-up, it was also found that the rate of capsular contracture was decreased with the placement of the implant subpectorally [3]. Although this approach decreases the “rippling” seen with subglandular placement,

patients may experience animation distortion following the transection of the pectoralis major muscle. The muscle-splitting technique notes a decrease in breast animation deformity associated with submuscular implant placement. As described by the author, the muscle-splitting technique preserves the fixed point of pectoralis attachment medially, therefore eliminating the potential for implant deformation by the contracting muscle. Although other techniques can be used to prevent the animation deformity, the author states the presented approach eliminates this possibility. In addition to preserving the attached insertion of the pectoralis muscle, another reason for the absence of the animation deformity could be only a small portion of the implant resides posterior to the muscle, and therefore, there is less tension on the pectoralis muscle when activated.

However, as a whole, the ideal breast maintains a 45:55 ratio between upper and lower pole volume [4]. There is a tendency for Europeans to prefer a more natural appearance of the breast with equal distribution of upper and lower pole fullness, while American patients typically prefer more upper pole fullness when compared to their European counterparts.

Upon review of the presented article, the lower pole of the augmented breasts expands nicely, but the upper pole lacks the fullness often desired by many American patients. We caution the reader, with overexpansion of the lower pole, the distance between the nipple–areolar complex and inframammary fold will elongate and occasionally, and the patient may develop star-gazing nipples. Looking at the author's results, the muscle-splitting techniques seem to be more appropriate for those patients desiring more lower pole fullness as opposed to upper pole fullness and cleavage.

The use of a retrofascial plane was developed to capture the advantages of both subglandular and total submuscular

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approaches [5]. Graf et al. explain by placing the implant subfascially, patients did not develop implant distortion associated with movement of the pectoralis muscle. They noted this was evident even in larger implant sizes (310 g). In our market, 310-g implants would be considered on the smaller side of implants placed. With smaller implants, subfascial placement does not exhibit implant visibility; however, larger implants placed subfascially may require additional fat grafting to augment the soft tissue coverage and decrease noticeable rippling.

In our experience, the majority of patients in our practice desire larger implants, with a fuller upper pole appearance. For these patients, we previously used a subfascial pocket with or without fat grafting; however, with the increased rate of capsular contracture associated with the subfascial placement, we now prefer a dual-plane approach for the majority of our patients. As echoed by Tebbetts, by placing the implant in a dual-plane pocket, this allows us the ability of precise implant placement by adjusting the relationship between the breast parenchyma and the pectoralis muscle [6].

Every patient has their own expectations regarding the postoperative appearance of their breasts. It is paramount that the operating surgeon discuss this with them at their preoperative consultation. As Cronin and Biggs state, “a single key does not fit every lock,” therefore one must take into account a patient’s breast shape, underlying anatomy, and personal desires prior to formulating a successful plan for breast augmentation. A surgeon will undoubtedly have a preferred implant placement plane, but should be well educated with the inherent drawbacks and benefits to

multiple approaches to obtain the patient’s desired outcome.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflicts of interest to disclose.

Ethical Approval 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.

References

1. Araco A, Caruso R, Araco F et al (2009) Capsular contractures: a systematic review. *Plast Reconstr Surg* 124:1808
2. Dempsey WC, Latham WD (1968) Subpectoral implants in augmentation mammoplasty: a preliminary report. *Plast Reconstr Surg* 42:515
3. Biggs TM, Yarish RS (1990) Augmentation mammoplasty: a comparative analysis. *Plast Reconstr Surg* 85:368
4. Mallucci P, Branford OA (2014) Population analysis of the perfect breast: a morphometric analysis. *Plast Reconstr Surg* 134:436
5. Graf RM, Bernardes A, Rippel R et al (2003) Subfascial breast implant: a new procedure. *Plast Reconstr Surg* 111:904
6. Tebbetts JB (2001) Dual-Plane breast augmentation: optimizing implant-soft tissue relationships in a wide range of breast types. *Plast Reconstr Surg* 107:1255

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