the patient willingly accepts and is often grateful for. Our critic has misunderstood the process when he says it allows the patient to "simply choose what they want."

The writer says that "optimally educated patients rarely opt for bra stuffing size selection." How would he know? Has he tried it? Does he offer it as an option? Better yet, after scientifically applying the high five technique and determining the *exact* implant size for the patient, why not let the patient try it on beforehand as an additional adjunct in managing the patient's expectations, not to mention individually verifying a purely numbers-driven size determination?

We are baffled by the assertion that a patient's height, weight, hip width, personality, and even geographic demographics have nothing to do with implant size selection. Even the most doctrinaire methodology must reveal many instances where more than one size will be compatible with a patient's tissue characteristics. These other factors are important determinants in final size selection within the range permitted by the patient's anatomy. Not to consider factors other than breast anatomy ignores the patient as a whole. Furthermore, these factors speak to the artistry involved in breast augmentation, an element that is not served by a purely numbers-driven technique that does not focus outside of the breast base diameter.

It is well understood that too large an implant can result in late tissue stretch and its sequelae. Most of the implants that we use are between 250 and 350 cc, and in postpartum patients, they are typically less than that. We rarely use sizes that begin with a 4, a practice that minimizes late stretch problems. It is also axiomatic that sufficient upper pole fill is a key goal in the postpartum patient. We disagree, however, that a postpartum patient must always be larger than a B cup to achieve this.

To be clear, preoperative sizing is not a precise method and is of course subjective. Improvements in the technique would be helpful and possibly forthcoming. We do not believe that the ongoing advances in three-dimensional patient photography with implant size simulation are the answer. There is no substitute for the patient trying on different sizes and visualizing the effect in clothing and experiencing the implant weight. The method is very instructive in revealing the patient's aesthetic vision in a way that dictating a size based on tissue characteristics alone can never do.

Finally, what can we say to the individual who makes vociferous arguments supported only by his own publications? It logically follows that the ideas of others will not be considered without strong prejudice. We have not witnessed the cognoscenti in plastic surgery today taking up the charge of perfecting choreographed surgery, using the high five system, permitting their patients to go out for dinner, shopping, and dancing on the day of surgery,[1] or replicating the perfect record of 50 consecutive breast augmentations without a single instance of reoperation (itself a gift to the plaintiff's bar). Our system operates on a different value system that fosters a collaborative bond between the patient and surgeon, embraces the role of artistry beyond scientific analysis alone, and pursues a unique solution for each patient.

DOI: 10.1097/PRS.0b013e318200ac3f

David A. Hidalgo, M.D.

Jason A. Spector, M.D.
Weill-Cornell Medical College
New York, N.Y.

Correspondence to Dr. Hidalgo
655 Park Avenue
New York, N.Y. 10065
dh@drdavidhidalgo.com

REFERENCES

1. Tebbetts JB. Achieving a predictable 24 hour return to normal activities after breast augmentation: Part I. Refining practices by using motion and time study principles. *Plast Reconstr Surg.* 2002;109:273–290; discussion 291–292.
2. Tebbetts JB. Achieving a predictable 24 hour return to normal activities after breast augmentation: Part II. Patient preparation, refined surgical techniques, and instrumentation. *Plast Reconstr Surg.* 2002;109:293–305; discussion 306–307.
3. Tebbetts JB, Adams WP. Five critical decisions in breast augmentation using five measurements in 5 minutes: The high five decision support process. *Plast Reconstr Surg.* 2006;118: 35S–45S.
4. Tebbetts JB, Tebbetts TB. An approach that integrates patient education and informed consent in breast augmentation. *Plast Reconstr Surg.* 2002;110:971–978; discussion 979–981.

Where Are the Data?

Sir:

In "Preoperative Sizing in Breast Augmentation" (*Plast Reconstr Surg.* 2010;125:1781–1787), the authors' conclusion that "sized patients were more satisfied than controls" was not supported by their data. Each of their three endpoints, "would prefer a different size," "procedure satisfaction average," and "had size change," was statistically insignificant.

Moreover, 16 percent of the sized patients "would prefer a different size," and 30 percent felt the sizing was inaccurate. Far from supporting their conclusion, such data repudiate it, and with a follow-up of only 34 percent in the controls and 53 percent in the study group, one cannot conclude that the 21 percent (versus 16 percent) that preferred a different size and the 4.2 (versus 4.5) satisfaction average represented even a mild trend. The greater length of follow-up for the controls might alone explain the difference in the reoperation rate (21 months versus 12 months).

The same surgeon performed surgery on both groups successively, not concurrently. It is unimaginable that he would not have learned lessons managing the unhappy control patients who influenced his subsequent counsel to the study patients. Thus, from the beginning, this study was not designed to reasonably isolate the variable of using preoperative implant sizers.

Saying that tissue-based planning "represents a fait accompli without participation beyond her anatomy" is a

common misunderstanding. To the contrary, the patient participates demonstratively. She tells the doctor she wants an implant that ideally fills her breast, leaving the upper pole neither empty nor bulging. The surgeon uses a measurement system to achieve that very goal.

The questionnaire should have asked whether patients were happy with the "fill" of their breasts. Whether or not a patient mentions a specific size, they always make a request regarding whether or not they want to be natural. Implant volume affects not just size but also fill and thereby shape. Failing to ask a follow-up question about satisfaction with fill misses at least half of what is relevant about implant volume.

Asking a patient whether she wants to be a different size is relevant only if they are also asked about whether they would accept the corresponding consequences. Those wanting smaller should be asked whether they would still do it if it meant being empty and underfilled; those wanting to go larger should be asked whether they would change if it meant being unnaturally bulging in the upper breast and perhaps more stretched over time.

This concept is ingrained in patients sized with a tissue-based system. However, when an exercise such as this is performed at the beginning, by definition patients are led to believe that they can pick their size on the basis of their wishes on the days of their sizing visits. This sets them up to second-guess their earlier decision or to even change their mind, always leaving the door open to a revision for size.

Finally, the complete recipe for this article was not given to readers. It described how the patients used the sizers, but it did not describe the critical roles of the nursing staff (how they decided what bra size to give and whatever else they said during the visits) and the surgeon (how he determined the limitations of their tissues). No reader of this article has reason to believe that they can copy what was described in this article and achieve similar results themselves.

DOI: 10.1097/PRS.0b013e318200abe3

Steven Teitelbaum, M.D.
David Geffen School of Medicine at UCLA
Los Angeles, Calif.

Correspondence to Dr. Teitelbaum
1301 20th Street, Suite 350
Santa Monica, Calif. 90404

Reply: Where Are the Data?

Sir:

As this writer appears philosophically aligned with the previous one, our response to that letter generally applies to this one as well. We would like to focus instead on some of the different questions raised.

The assertion that lessons in patient management learned from unhappy control patients somehow biased the results from the experimental group that followed is not true. In fact, it was the practice of using a consistent approach and still experiencing a small percentage of emotionally charged wrong-size situations postoperatively that led to the need to do things differently. Having now done that, and becoming a bit smarter in the process, we would never go back to practicing breast augmentation without the benefits that preoperative sizing techniques offer.

We disagree that the questionnaire was faulty because it did not specifically ask about fill. Patients with wrong-size issues in our experience like their breasts after surgery but just want them larger in a global sense (no pun intended). They do not isolate their complaints specifically to a "fill" issue.

We also completely disagree that a patient wishing for a smaller size is condemned to an empty upper pole or that those wishing for a larger size are equally condemned to late tissue stretch problems. There are usually solutions in both scenarios that are not extreme enough to cause these problems. We feel instead that these are "come-from-behind" arguments offered to the unsatisfied patient that has not been given the opportunity to be a partner in size selection in the first place.

This writer also misunderstands the preoperative sizing process. The patient is not allowed to unilaterally decide what size she wants. She is given a range to try on that is consistent with both her breast anatomy and her body habitus. The patient is counseled during the process when she strays outside of the range that the surgeon believes he can deliver. In this way, preoperative sizing serves a useful adjunct, not as a process that overrides anatomical constraints.

It is true that the patient does sometimes change her mind or cannot decide what she wants. That is why we repeat the process on a separate day when such issues arise. More time spent with the patient usually resolves the problem. Sometimes, patients cannot decide between a 25-cc difference in size, which is quite understandable. In these instances, the patient willingly cedes control to the surgeon to make the final decision intraoperatively, a process aided by visualizing both options in situ using sizers. In our experience, patients do not wander over a wide size range even when uncertain.

Finally, the role of the nurses can be clarified. The nurses are given a starting range to work with that is dictated by the surgeon following patient examination. Bras are selected that best accommodate these sizes for the individual patient. Factors such as breast position on the chest (both vertically and transversely), skin quality, breast base diameter, existing breast volume and its anticipated influence on tissue compliance, nipple position, areolar diameter, inframammary crease location relative to the inferior areolar margin, inframammary crease configuration, body habitus, height, patient goals, and of course any ptosis issues are among those considered in setting the volume and diameter parameters for the sizing process.

Although not perfect, preoperative sizing is effective. Moreover, the ultimate responsibility for size selection is shared between the patient and the surgeon using this collaborative method. As stated in the article, this has made breast augmentation a much more "uni-