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Reply: Does Age Really Impair Aesthetic Outcome in Breast Reduction Surgery?

Sir:

I thank Dr. Bonomi et al. for their comments on "Increasing Age Impairs Outcomes in Breast Reduction Surgery."[1] This article was based on a very large retrospective review of more than 2000 breast reduction procedures performed by multiple plastic surgeons throughout an academic medical system over a 10-year period. Surgical techniques comprised the range of those used for breast reduction, with Wise pattern, inferior pedicle breast reduction representing the preferred technique, as is the norm with most articles investigating breast reduction outcomes. I appreciate the opportunity to respond to the issues raised in this letter from Milan.

First, there is no question that there are multiple studies beyond the one cited that demonstrate significantly elevated risk of complications from breast reduction surgery in the setting of elevated body mass index and tobacco use, and these references are cited in the article. Large amount of tissue resection, on the order of greater than 1 kg per side, has also been often cited as a confounding factor. Although our data collection included these variables, the focus of this article was on the impact of age, a factor that has been shown to impair surgical outcomes but has not been well studied in the plastic surgery literature. Data including body mass index, diabetes, hypertension, and connective tissue disorders, as you mention, were included in our multivariate statistical analysis. We included these data to be sure that the variable we were testing, age, was in fact a significant variable, canceling out the effects of other variables included in the analysis, such as those listed. Statistical analysis such as chi-square that tests the impact of a single variable on an outcome does not account for the impact of other factors that may be more important than the variable tested. This is why we used multivariate analysis, and this is more completely described in the Methods section of the article. The impact of age on breast reduction outcomes is not actually the impact of body mass index, medical comorbidities, or tobacco use.

The antibiotic protocol in this study was neither universal nor scientifically assessed. Generally, antibiotic use at our institution for breast reduction procedures is related to the presence of drains. Intravenous antibiotics are given before incision and throughout the duration of the patient hospital stay, which was most often overnight, when the patient was not an outpatient. Most patients have drains removed the morning after surgery, particularly after Wise pattern, inferior pedicle breast reduction. Patients who underwent vertical techniques and superior pedicle breast reduction with nipple grafting tended to maintain drain tubes for 1 week, with oral antibiotics prescribed while drains were in place. This practice, however, is not evidence-based, and many hospitals are now promoting antibiotic protocols for surgery patients who include preoperative dosing and three subsequent antibiotic doses of either a first-generation cephalosporin such as cefazolin or clindamycin in the setting of penicillin allergy. Antibiotic use is becoming more restricted with growing concerns over bacterial resistance to antibiotics, with no scientific evidence demonstrating a benefit of prolonged antibiotic treatment, even with drains in place. The study of antibiotic use in breast reduction surgery and its impact on outcomes would be a welcome, original article that would be a valuable contribution to evidence-based medicine guidelines toward which we aim.

Again, I thank Dr. Bonomi et al. for their comments and their interest in this article. I hope this response better explains why we believe age has a greater impact on breast reduction outcomes than previously believed.

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DISCLOSURE

The author has no financial interest to declare in relation to the content of this communication.

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Need for a Standard Procedure for Needle Aponeurotomy, Consensus Definition of Recurrence, and Functional Assessment in Dupuytren Disease

Sir:

We read with interest the article by van Rijssen et al. reporting on the 5-year results of a randomized clinical trial comparing needle fasciotomy (aponeurotomy) and limited fasciectomy in Dupuytren disease.[1] We congratulate the authors. Well-designed studies are sparse in the field, and improvement of knowledge remains of key importance for therapeutic advances.

However, the article by van Rijssen et al. raises some questions. We are surprised by the 5-year recurrence after needle aponeurotomy they showed, which is far higher than that previously reported.[2] The 5-year recurrence reported by Badois et al. is 50 percent. The discrepancy may be attributable to the recurrence criteria and the technical approach.[3] Various definitions are used for recurrence, and Badois et al. did not describe their criteria. Van Rijssen et al. clearly defined the recurrence, allowing comparison if using the same definition in other studies.[1] Apparently, the authors did not use local corticosteroid injection during the procedure of needle aponeurotomy. We recommend such an injection in our procedure, which may partly prevent a high rate of recurrence.[3]

The recurrence rate was lower at 5 years after fasciectomy as compared with needle aponeurotomy. Nonetheless, patient preference remained on the side of needle aponeurotomy when discussing a new treatment procedure. In their report on the short-term results of the study in 2006, van Rijssen et al. showed an earlier functional improvement after needle aponeurotomy as compared with fasciectomy using the Disabilities of the Arm, Shoulder and Hand questionnaire.[4] It should have been interesting to provide information about functional results at longer follow-up in the present study. We recently developed and validated a questionnaire, the Unité Rhumatologique des Affections de la Main scale, for such an assessment in Dupuytren disease.[5] A patient's subjective perception of their own difficulties in daily living is relevant and recommended in clinical trials.
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DISCLOSURE

All of the authors had a scientific collaboration with Pfizer for the development and validation of the Unité Rhumatologique des Affections de la Main scale. Dr. Beaudreuil, Henri Lellouche, and Thomas Bardin participated in teaching sessions for physicians organized by Pfizer. Henri Lellouche is a member of an advisory board for Pfizer.

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Reply: Need for a Standard Procedure for Needle Aponeurotomy, Consensus Definition of Recurrence, and Functional Assessment in Dupuytren Disease

Sir:

Thank you very much for your comments on our article. In reply to your letter, "Need for a Standard Procedure for Needle Aponeurotomy, Consensus Definition of Recurrence, and Functional Assessment in Dupuytren Disease," we would like to make the following comments.

We do not agree that our recurrence rates are much higher than previously reported: this only accounts for one retrospective study, which was performed by Badois et al., in which the authors, as you have correctly mentioned, do not state their definition of recurrence.[1] The study by Badois et al. is also the only study that presents long-term results of needle aponeurotomy with the use of steroids. In a pilot for this study, we found a 65 percent rate of recurrence after a mean of 33 months,[2,3] and in our randomized controlled series, the recurrence rate was 64 percent after 3 years. Foucher et al. reviewed 100 cases after a mean of 3.2 years[4] and found a recurrence rate of 58 percent. These figures indicate that we executed percutaneous needle fasciotomy well and that our recurrence data are in fact comparable. This is even more so, because we are the first to publish a prospective randomized study on the results of percutaneous needle fasciotomy versus limited fasciectomy and therefore there has not been selection bias.

We would also like to address the statement that local corticosteroids reduce the risk for recurrence, as this has not irrefutably been proven: it has been used since the mid 1940s and has largely been abandoned.[5,6] It was never proven to be beneficial other than in painful nodules, where these would sometimes soften.[7]

Regarding the Disabilities of the Arm, Shoulder and Hand score: as time progressed during the study, many