

Commentary

Commentary on: Preoperative Respiratory Physiotherapy in Abdominoplasty Patients

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Respiratory physiotherapy postabdominal and other major surgeries is a well-embedded practice standard. We have only to review our forefathers' general surgical literature to find plenty of support for this preventative strategy in major abdominal surgeries.¹ This article attempts to test the hypothesis that similar *preoperative* support may synergistically reduce postoperative pulmonary complications in the abdominoplasty patient.² But before one delves into the specifics of this paper, it is useful to stand back and appreciate the inherent value of any paper that attempts to inaugurate strategies to reduce risks in our surgeries. It is fruitful to repeatedly murmur under one's mask the mantra that the abdominoplasty, that aesthetic surgery, is always *elective* surgery. Thus, *any* complication is one too many. But clearly, no matter how hard we try, surgical complications will forever challenge us. However, this fact should not absolve us of our perpetual duty to deliberately choose what kinds of complication we, as surgeons, are willing to witness postoperatively: it is what I call our personal "boiling points." Ideally, the complication should be self-limiting or easily reversible. Reciprocally, a complication that is life threatening should give us pause and probably be considered "deal-breakers."^{3,4}

The abdominoplasty procedure harbors one of the highest overall risk profiles and specifically, one of the most daunting and deadly: pulmonary embolism.⁵⁻⁷ I say daunting, because even at the mid of this late year 2017, this disease remains confounding as to its true etiology and thus elusive as to its definitive prevention. One causal hypothesis is that the abdominoplasty increases the intra-abdominal pressure (IAP) leading to stasis in the deep venous system as well as directly compromising pulmonary

function.⁸⁻¹² And it is the possible salutary effect of preoperative respiratory therapy on these very data points, IAP and spirometry function, in the prevention of pulmonary complications, that this paper endeavored to study.

Unfortunately, the authors excluded the high risk respiratory patients, the very ones who would most likely benefit from preventive measures and most easily prove their hypothesis. But, in their defense, they do confess to the value of conducting just such a future study. Surprisingly, the authors found no difference in spirometry measurements in the perioperative period in patients who received preoperative respiratory physiotherapy relative to the control group. On the other hand, they did determine that completing one week of physiotherapy prior to abdominoplasty successfully lead to a reduction in IAP compared to a nonphysiotherapy control group. Finally, without measuring *clinical* outcomes, the authors could only, but correctly, *infer*, rather than definitively prove that this lower IAP reduction may reduce serious pulmonary complications.

Still, the paper's value is far from diminished and instead should spur us on in our efforts to reduce complications. As many of you know, I am frankly perpetually distracted

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by any and all of our potential perioperative complications; which in turn, if witnessed, inevitably results in another preventative practice modification.¹³ And the key word here is *preventative*: and if any preventative measure is simple and cheap, then, in all deference to this paper, a study is arguably unnecessary to prove its efficacy. To wit: even if this paper had made no definitive conclusions, would any surgeon not consider improving preoperative pulmonary function anything but a good omen for a better, safer recovery? So clearly, inception of simple breathing exercises before any major surgery *could* be a worthwhile adjunctive maneuver in the prevention of the dreaded pulmonary embolism.

I congratulate the authors on their earnest efforts and on rousing this surgeon: I have now incorporated a protocol of preoperative respiratory “calisthenics” into my checklist for not only my abdominoplasty patients but in fact, for all my patients who are to undergo a major surgery.

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