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Correspondence and Communications

Letter to the editor regarding: "Effect of compression garments on post-abdominoplasty outcomes: A systematic review of the current evidence"

Dear Editor,

We read with great interest the recent publication by Arkoubi, entitled "Effect of Compression Garments on Post-Abdominoplasty Outcomes: A systematic Review of the current Evidence."[1] We applaud the author's attempt to highlight an understudied aspect of plastic surgery and their utilization of rigorous research methods, including a detailed PRISMA approach. However, we recently published a paper that covers the same topic, entitled "The Use of Postoperative Compression Garments in Plastic Surgery—Necessary or Not? A Practical Review."[2] We included all but one of the papers reviewed by the author, and we reported the same findings that compression garments demonstrated no benefit for postoperative complications following abdominoplasty. Additionally, multiple aspects of the paper warrant consideration about the quality. For one, the single publication cited in the "Incidence of Seroma" section of the results makes no mention of seroma at all,[3] although we believe this was intended to be a separate paper cited elswhere.[4] Additionally, in the "Discussion" section, the author concludes that "compression garments may prevent seroma formation," yet the results from the relevant study demonstrated no benefit.

Moreover, although the paper briefly reviews evidence of compression garments in other abdominal surgery settings, such as hernia repair, it intentionally reduces the scope of focus to abdominoplasties only. We believe this is counterproductive to understanding an already understudied and underreported niche of plastic surgery. In our paper, we aimed to provide the comprehensive context of compression use throughout abdominal surgery to enable more educated decisions stemming from both direct and indirect evidence. For example, although the author repeatedly mentions the significance of pain following abdominoplasty, none of the publications cited had results on this outcome. In contrast, we reviewed evidence demonstrating that compression garments may reduce immediate postoperative pain following other abdominal procedures, which may provoke deeper consideration on the use of compression garments after abdominoplasty, a closely related anatomical operation, despite the dearth of direct evidence in this setting.

We believe it is also important to acknowledge not just the lack of current evidence but also the notion that compression garments may conceivably have no benefit for several of the outcomes reviewed. As discussed in our paper, the scientific impetus for compression garment use in plastic surgery was originally for the aim of reducing postoperative subcutaneous edema. Although the author reports one paper showing no efficacy of compression garments in reducing edema following abdominoplasty, the further outcomes studied, such as seroma, have not been scientifically explored as benefits of compression and may be more related to surgical technique and/or postoperative activities. Without overt discussion of this possibility, the author's depiction of the current evidence may mislead that compression garments are futile when previous research may have just focused on non-applicable outcomes.

The author also says that the intention of the study is to provide informed recommendations on compression garment use but makes no recommendations in the discussion or conclusions. While we understand the dearth of evidence precludes concrete guidance, positive or negative, we feel that a more nuanced approach, rather than just highlighting the lack of evidence, is imperative for practical takeaways. For example, a practicing surgeon may be inspired to stop compression garment use altogether due to the absence of positive findings. However, the potential harm to patients after this decision must be reviewed, as we suggested, because patients may then choose compression garments on their own without clinical guidance. Downstream, this could increase their risk of potential consequences such as ill-fitting garments, discomfort, and soft tissue compromise.

We do agree with the author's recommendations for future research efforts. To establish practice guidelines, future studies should more rigorously report the specific parameters of compression used, including what type of garment, at what pressure, and for what duration they are utilized. We again appreciate the author's contributions and hope to stimulate further discussion on the efficacy of postoperative compression following abdominoplasty.

Ethical approval

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Conflict of interest

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Benjamin H. Ormseth
Department of Plastic and Reconstructive Surgery, University of Texas Southwestern, Dallas, TX, United States

Anna R. Schoenbrunner
Jeffrey E. Janis [1,2,*]
Department of Plastic and Reconstructive Surgery, The Ohio State University Wexner Medical Center, Columbus, OH, United States

E-mail address: jeffrey.janis@osumc.edu (J.E. Janis)
[*] Correspondence to: 915 Olentangy River Road Columbus, OH 43212, United States.
[1]Twitter: jjanismd
[2]Instagram: jeffreyjanismd

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