The Bivectorial Full-Thickness Superiorly Based NAC Flap: A New Option to Increase Plasticity and Decrease Tension in the Superior Pedicle Vertical Mammoplasty Technique

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Being an anatomist as well as a plastic surgeon, I would like to comment on the blood supply of the flaps described by O'Dey et al. [1]. I congratulate the authors on a well-written and good article. However, the statement that the authors created the term “highest thoracic artery,” which does not appear in anatomy text books, is incorrect. It appears in the 6th edition of *Nomina Anatomica* [2] and described as *arteria thoracica superior*, the internationally accepted nomenclature. It is a branch of the first part of the axillary artery and well described and illustrated in anatomy textbooks.

The blood vessel named the “supreme anterior intercostal artery” by the authors could be an aberrant highest intercostal artery (*arteria intercostalis suprema*), usually originating from the costocervical trunk (a branch of the subclavian artery) or a nipple-areola branch of the internal thoracic artery [3]. The highest intercostal artery must not be confused with the highest thoracic artery they are two different arteries of different origin. The former artery supplies the thoracic wall from the internal aspect and the latter from the external.

The author described in his operative technique complete detachment of the pedicle from the pectoral fascia and undermining of the flap to the level of the second rib in order to preserve branches originating from the thoracoacromial artery. The safety of this pedicle relies on his research done on seven cadaver dissections [4]. I would recommend that the authors read the article by Reid and Taylor [5]. They have done extensive research on the vascular territory of the acromiothoracic axis in 110

cadaver studies and their research revealed that the dominant supply to the skin is from the pectoral artery, one of the branches of the acromiothoracic trunk (thoracoacromial artery) by means of its fasciocutaneous branches, along the free lower border of the pectoralis major muscle. They have also shown that the dominant supply to the rib cage is from branches of the pectoral artery to ribs 3–5 in the midclavicular line. Dissecting the pedicle as the authors described, superiorly, to the level of the second rib will sacrifice these vessels with the risk of tissue necrosis. A better way to obtain upper-pole fullness would be to keep the posterior component of the flap attached to the chest wall to preserve the blood supply and to anchor this mass to the pectoral fascia at the level of the second rib. I have utilized this principle in inferior pedicle breast reduction and mastopexy procedures with good results.

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