

# BREAST AUGMENTATION: MAKING THE INFRAMAMMARY CREASE GREAT AGAIN!

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Figure 1

It would be no exaggeration to say that the Inframammary crease (IMC) is the foundation on which the edifice of the breast mound is built. Breast base width and soft tissue thickness of the upper pole of the breast are important considerations for breast augmentation planning, but ignore the IMC at your own peril!

Three important aspects of IMC need consideration when planning breast augmentation:

Symmetry of location of IMC, nipple to IMC distance on stretch, and reinforcement of IMC at the time of closure.

It is important to remember that IMC of the left and right breast may not be at the same level on the chest. The best way to assess this is ideally by spirit level or if that is not available a ruler can be used. Either of the instruments is placed at the IMC parallel to the floor, and the level is transposed to the sternum in the midline as a small horizontal line. The same is repeated on the other side. These horizontal lines in the mid sternum give the accurate difference in level, if any, of the IMC of both breasts. For instance, in the patient in *Figure 1* there is a subtle difference in the IMC levels; the right side being lower than the left. However, the incision was taken

in the existing IMC, without lowering the left side, resulting in exaggeration of the asymmetry following augmentation.

The nipple to IMC distance on stretch is critical in accurately placing the inframammary incision for breast augmentation. This was emphasized by Patrick Mullucci in his seminal article.<sup>1</sup> He espoused the I-C=E principle, where I stands for implant dimension, C for capacity of breast tissue and E for excess skin required. In order to get the aesthetically ideal upper to lower pole ratio of 45:55, 55% of round implant should be below the nipple meridian. Therefore, in a round implant, the "I" (implant dimension) will be calculated as projection of the implant + 55% of the height of the implant. However, an anatomical implant being bottom heavy, only 50% of the implant needs to be below the nipple meridian. Therefore, in this case "I" (implant dimension) will be projection + 50% of the height of the implant. This gives an aesthetically pleasing tight convex lower pole with flat or slightly convex upper pole of the breast. The C (breast tissue capacity) is the distance from nipple to IMC on stretch. If the implant dimension is accommodated by the breast tissue capacity then no need to lower the IMC and the incision can be taken in the existing IMC. However, if the former exceeds the latter then the amount of lowering of the IMC is determined by the formula I-C=E and the incision is taken at that lower level. **Figure 2** shows the patient, operated elsewhere, where the IMC was not lowered, despite the implant dimension exceeding the soft tissue capacity, resulting in an unsatisfactory outcome. Smooth implants are gaining in popularity because of the association of BIA-ALCL with textured implants, but the smooth implant, as opposed to the textured one, is unable to grip the surrounding tissue and therefore tends to glide caudally under the influence of gravity. This can easily disrupt the IMC, especially if it is weak.



Figure 2

Therefore, it is prudent that the IMC, at the time of closure, is fixed along the incision by suturing the breast fascia to the pectoralis fascia. This can be done by interrupted polyglactin sutures or better still with continuous barbed polydioxanone sutures.

In conclusion, if the IMC also gets its due attention during planning and execution of breast augmentation, then a satisfactory outcome is assured.

#### REFERENCES

1. Mallucci P, Branford OA. Design for natural breast augmentation: the ICE principle. *Plastic and reconstructive surgery*. 2016 Jun 1;137(6):1728-37.