Review of: "Assessment of the differences in the use of free iliac flap for maxillomandibular defects with patient-reported outcomes"

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Potential competing interests: No potential competing interests to declare.

Dear authors

Thank you for your interesting article reviewing your experience with the DCIA free flap.

In my opinion, there are a few commentaries to be done about possible bias in this study. Most of the cases 16/25 are due to causes different from tumors. This is an important asptect to take into account.

The other possible bias is that 21/25 of the reconstruction where secondary reconstruction. This is also important, as the surgery is much different and can not be compared to cases where primary reconstruction needs to be done, when complementary surgical procedures need to be done. Procedures such as tumor resecction, neck dissection or tracheostomy. This means a much longer surgical procedure, the need of postoperative intensive care with more risk of possible complications, and possibly a worst recovery in terms of function and quality of life, depending on the tumor type. The need of postoperative medical treatment such as radiotherapy also needs to be taken into account, when comparing outcomes.

Finally the last comment is in regard of the postoperative donor site complication rate. In this retrospective study 18/25 of the cases wher bone free flaps with no soft tissue component.

Probably this is the reason why you report so little % of complications such as hernia in the donor site. In my experience, DCIA free flap is a very nice flap to be indicated when deffects smaller than 10 mm are needed and when almost no soft tissue component is needed.

It is important tha you mention that 72% of the cases reported were reconstructed with a bone free flap with no soft tissue component. This is the key to explain the low rate of donor site complication. The DCIA has a higher rate of donor site complication compared to fibula or scapular flap when a composite flap is raised. This means a flap including, bone, muscle and cutaneous tissue. Denervation of the oblique muscles and including a portion of the intern oblique muscle, has a high rate of complication such as hernia.

Also the lenght of the bone deffect is very crucial for deciding which is the best flap option for maxillo mandibular reconstruction. Defects longer than 10-12 mm need to be reconstructed with other type of flaps such as the fibula or the

scapula flap. Longer defects treated with the DCIA iliac free flap, are difficult to obtain due to the shape of the iliac bone, defect in the donor site and the risk of complication etc.

To conclude, we agree with the authors, the iliac bone is a great flap and donor site for maxillo mandibular defects when a small component or no soft tissue component needs to be raised with the bone flap. Also for defects smaller than 10-12 mm. For longer bone defects and when extended soft tissue defects need to be reconstructed, we do not consider it is a first option flap.

For dental rehabilitation the iliac bone free flap has clear advantages compared to other bones such as the fibula or scapular bone, due to the height and width of the iliac bone flap that can be raised.

Nothing has been mentioned about the split inner cortex iliac bone free flap described by Shenaq in 1994. I would like to know if you consider this flap design modification for some type of defects.

I hope you find my comments useful to improve your work

Kind regards