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Preoperative study of perforators branching: Clinical implications in free flaps for head and neck reconstruction

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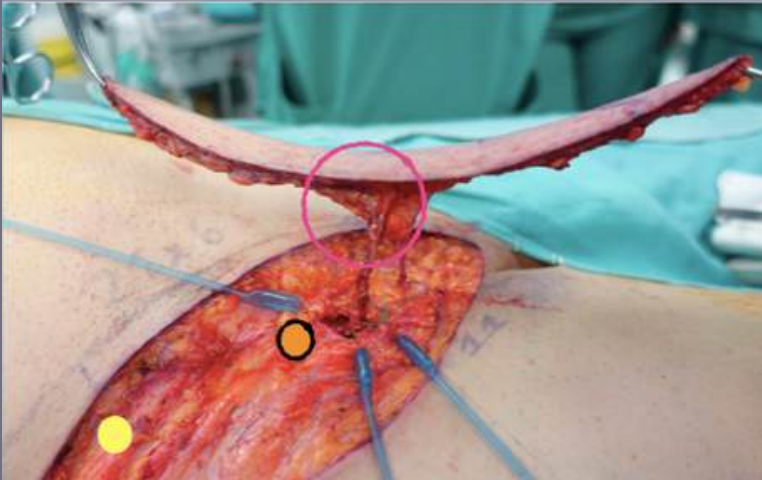


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Thin and superthin perforator flap elevation based on preoperative planning with ultrahigh-frequency ultrasound

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Epidermis

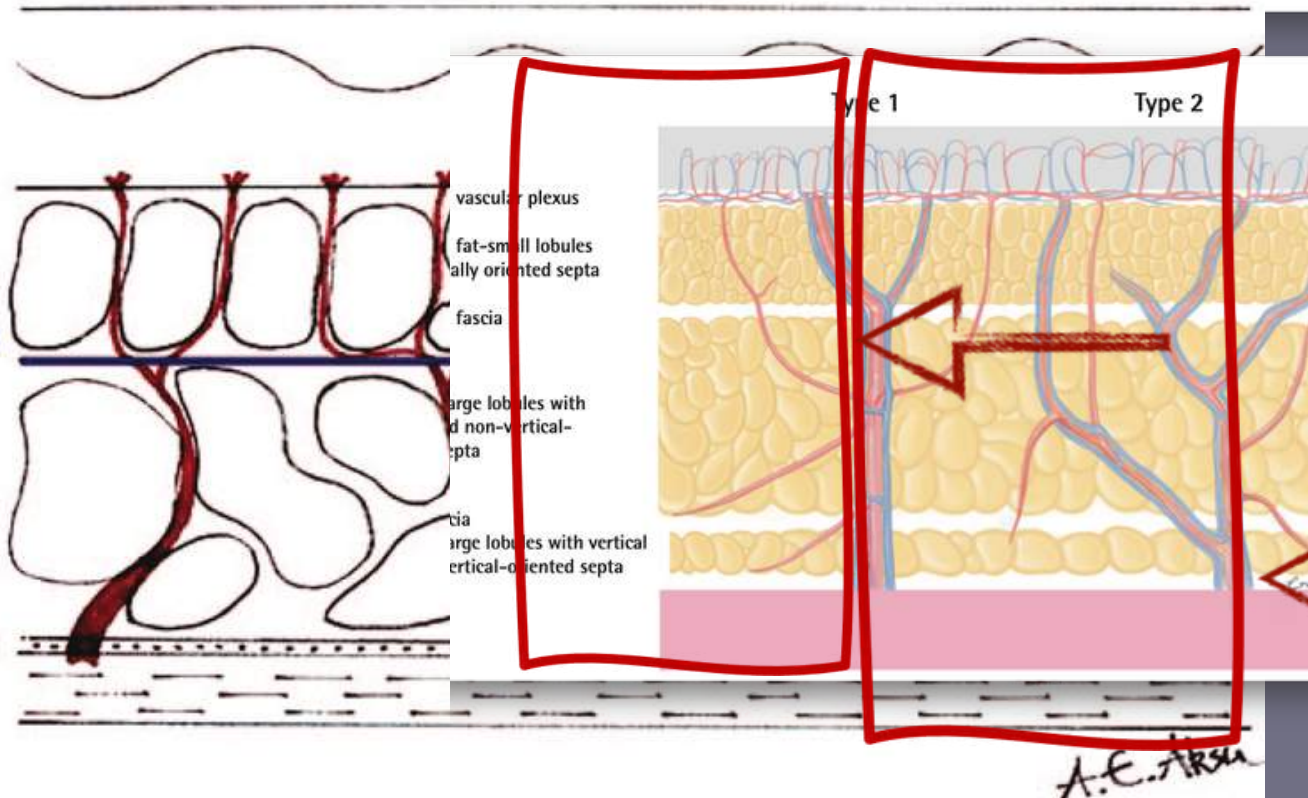
Dermis

Superficial Adipose Layer

Subcutaneous Fascia

Deep Adipose Layer

Muscle Fascia





Is this just an anatomical evaluation as an end in itself??

or

Does it have a real clinical application?

CLINICAL

CASE

- Female, 80 yo;
- Squamous cell carcinoma;
- No distant metastases.

Tumor resection

+

Complex enlarged parotidectomy

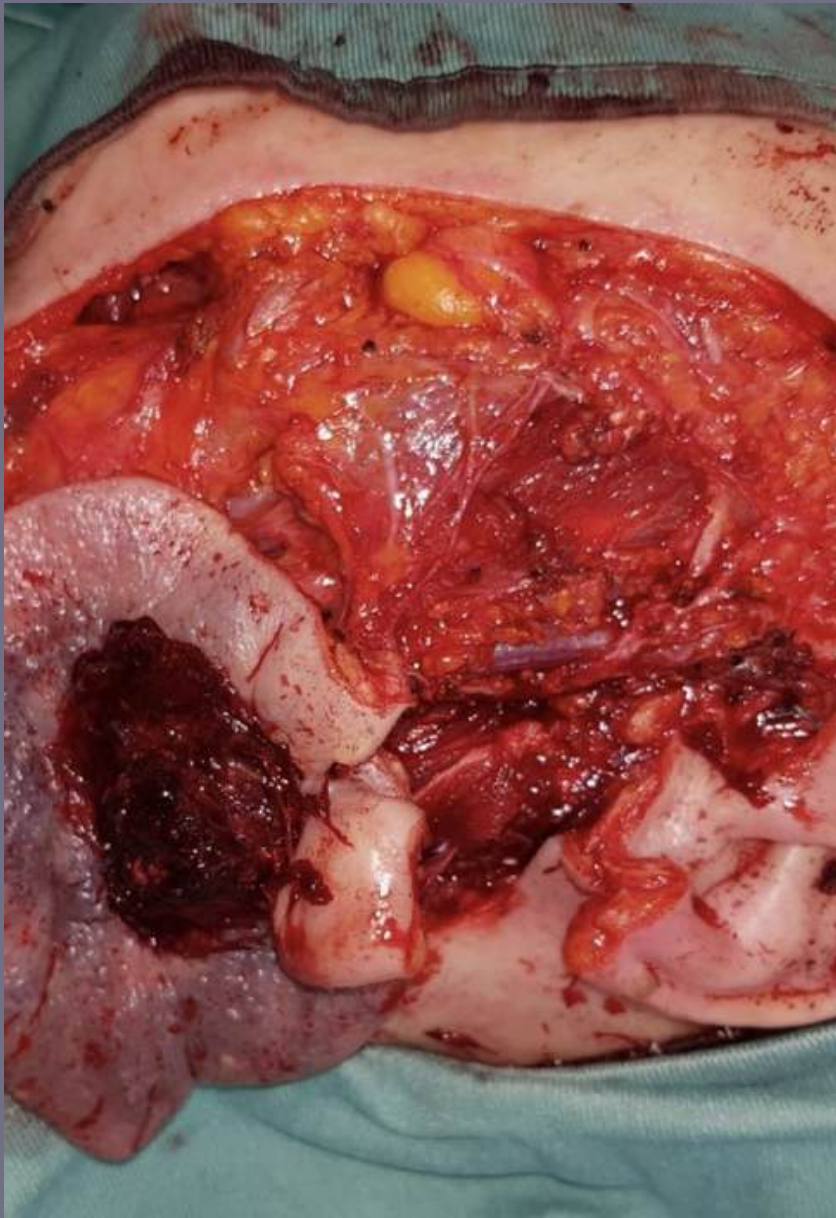
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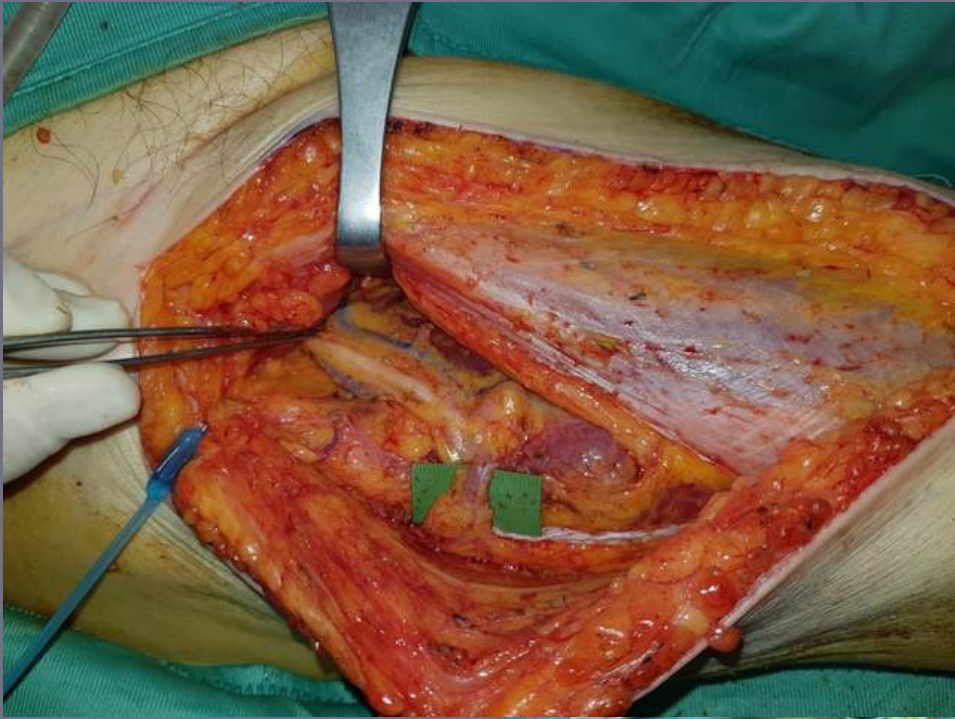
*Right laterocervical lymph nodes
dissection (I-V)*

+

*Sternocleidomastoid m. proximal
resection.*









2 microanastomosis:

- Latero-lateral on external jugular vein;
- Latero-lateral on external carotid artery.

5 days

po



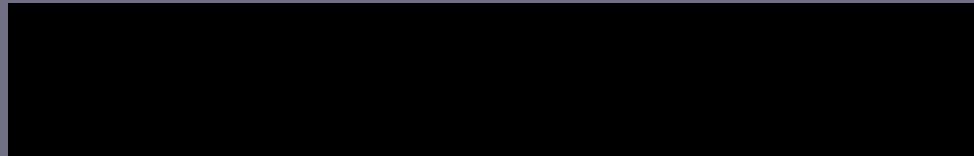
60

days

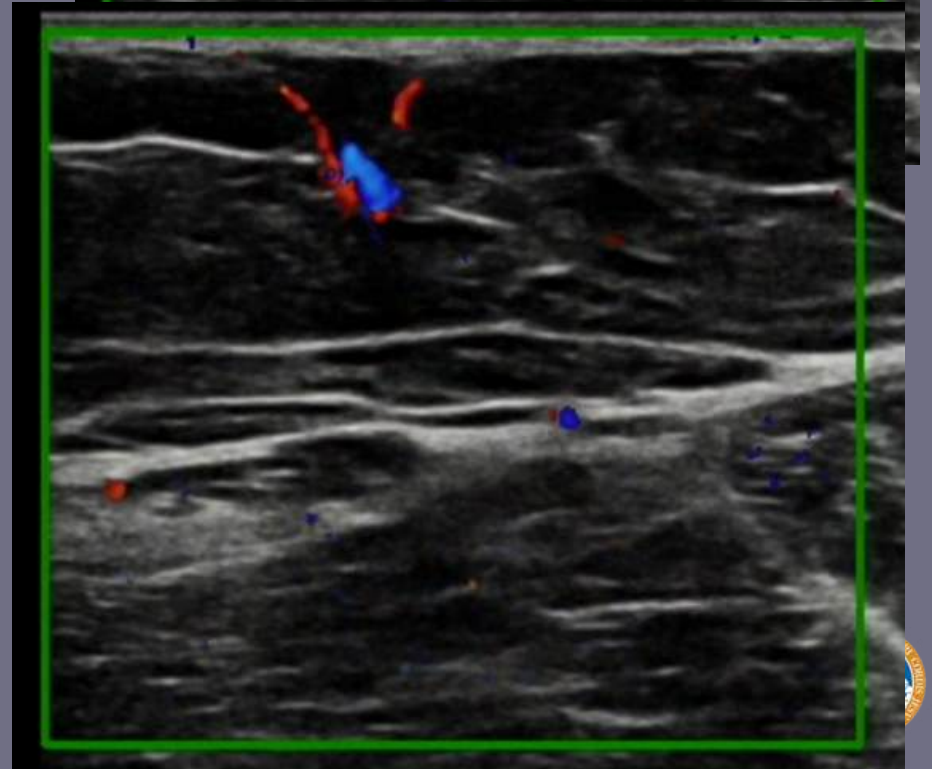
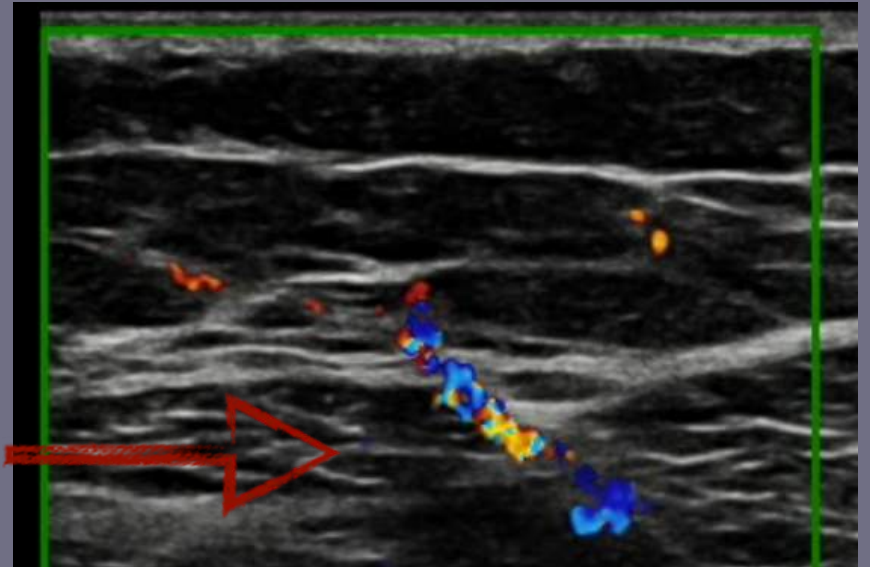
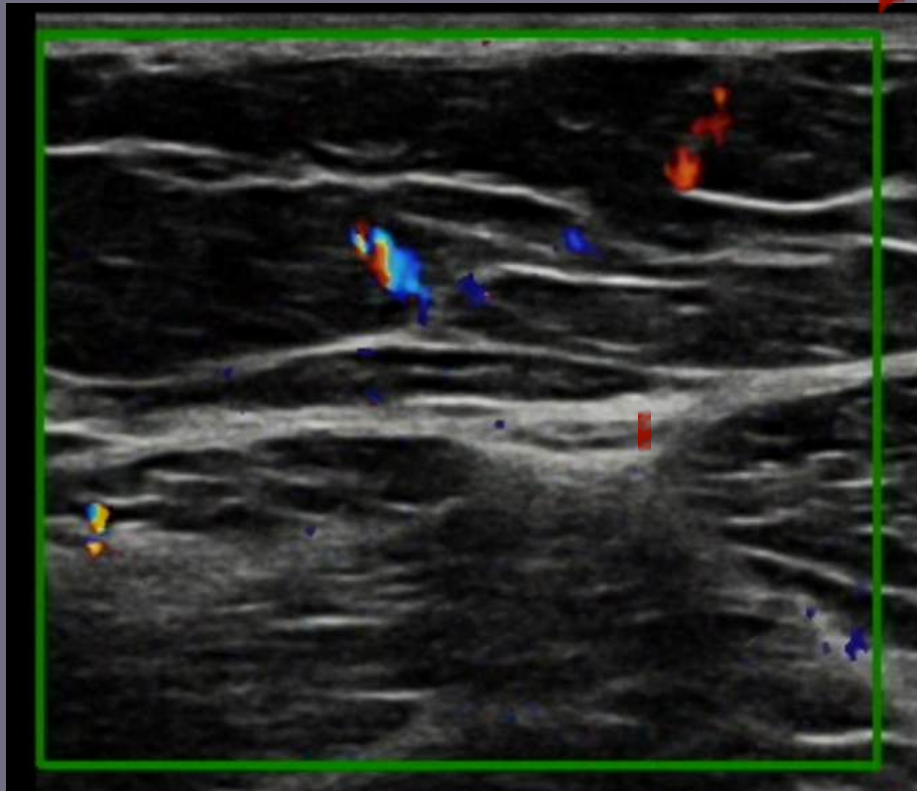
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We should find this perforator.....



Instead of this.....



Conclusio ns



- Preoperative US (or CT) evaluations of vessel branching...
- Principal vessel course and caliber....
- Branching points in the subcutaneous layers....

**A PREOPERATORY "FOCUSED"
US STUDY CAN
SAVE YOUR ULTRA-THIN FLAP**