SUPERTHIN AND SUPRAFASCIAL ALT FLAP FOR HEAD AND NECK RECONSTRUCTIONS - PART 1

VASCULAR ANATOMY & PREOPERATIVE DIAGNOSTIC

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Gemelli
Fondazione Policlinico Universitario A. Gemelli
Università Cattolica del Sacro Cuore

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British Journal of Plastic Surgery (1984) 37, 149–159

The free thigh flap: a new free flap concept based on the septocutaneous artery

Y. G. SONG, G. Z. CHEN, and Y. L. SONG

The Plastic Surgery Hospital, Beijing, People's Republic of China

Summary—Based on the septocutaneous artery flap concept, the thigh, which is the commonest conventional donor site for split-skin grafts, can also become a donor area for skin flaps. The thigh flap, with its large and long neuro-vascular pedicle, can be used either as a free flap or as an island flap as an alternative to the lower abdominal flap, groin flap, tensor fasciae latae myocutaneous flap, sartorius myocutaneous flap or the gracilis myocutaneous flap. The anatomical basis, operative technique and characteristics of the thigh flap are discussed.

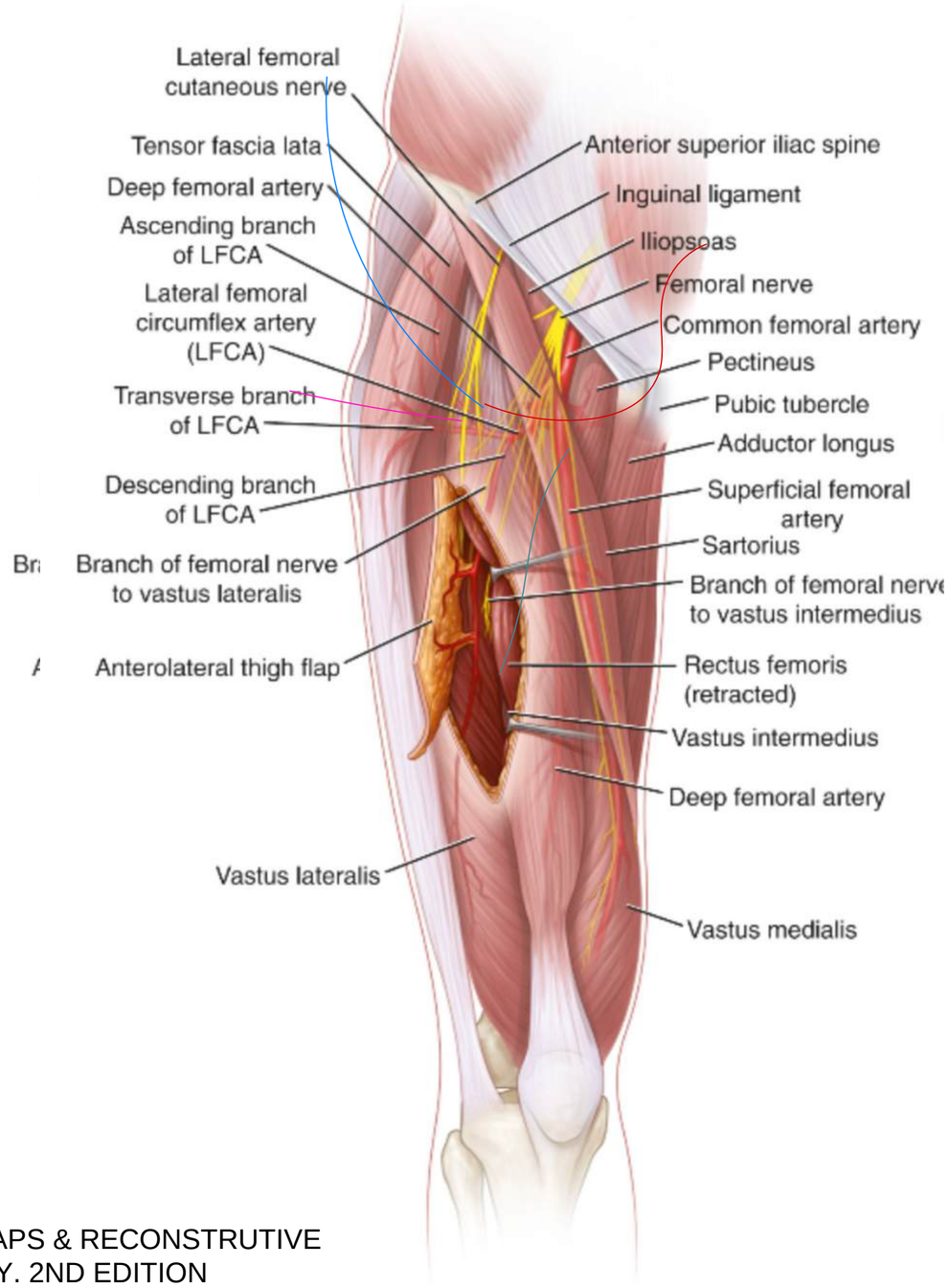
- RELIABLE BLOOD SUPPLY
- LONG PEDICLE, LARGE VESSELS
- PLIABLE, SUITABLE TO THINNING
- FLOW-THROUGH FLAP
- TWO-TEAM APPROACH
- SKIN, MUSCLE FASCIA

1993

Free Anterolateral Thigh Flaps for Reconstruction of Head and Neck Defects

Isao Koshima, M.D., Hiroshi Fukuda, D.D.S., Hidekazu Yamamoto, M.D., Takahiko Moriguchi, M.D., Shugo Soeda, M.D., and Shigeo Ohta, M.D.

Okayama, Shizuoka, and Ibaraki, Japan



WEI MARDINI. FLAPS & RECONSTRUTIVE SURGERY. 2ND EDITION

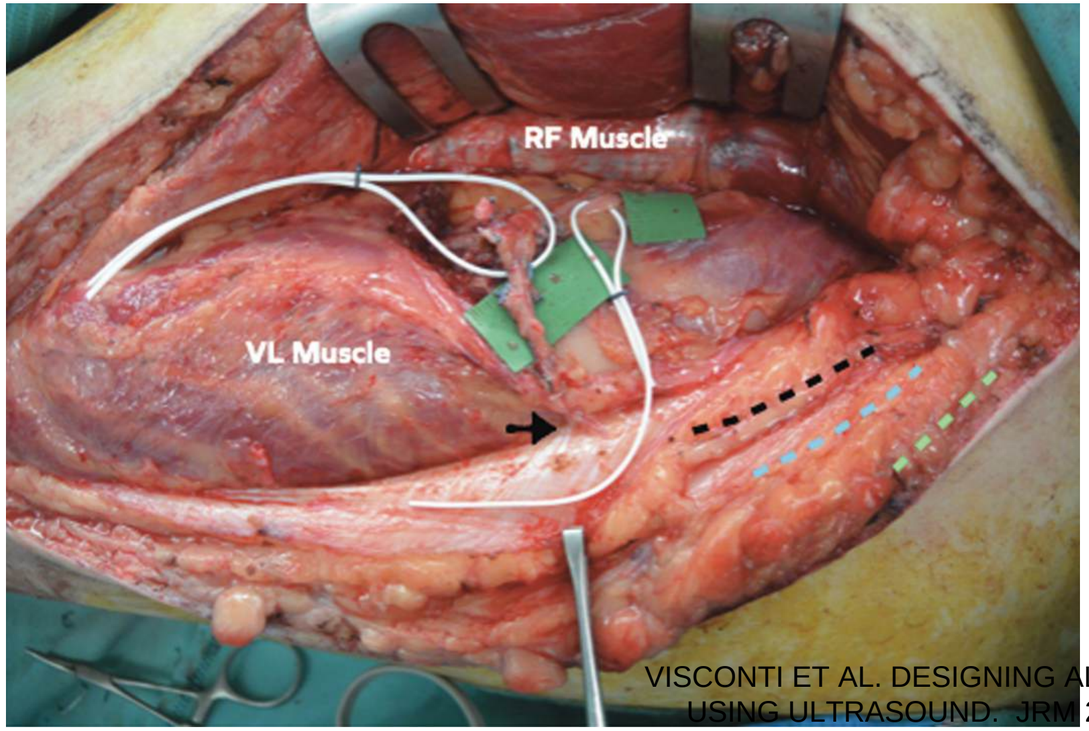
Lateral **c**ircumflex **f**emoral **a**rtery

Ascending branch

Transverse branch

DESCENDING branch

OBLIQUE branch IN 30%



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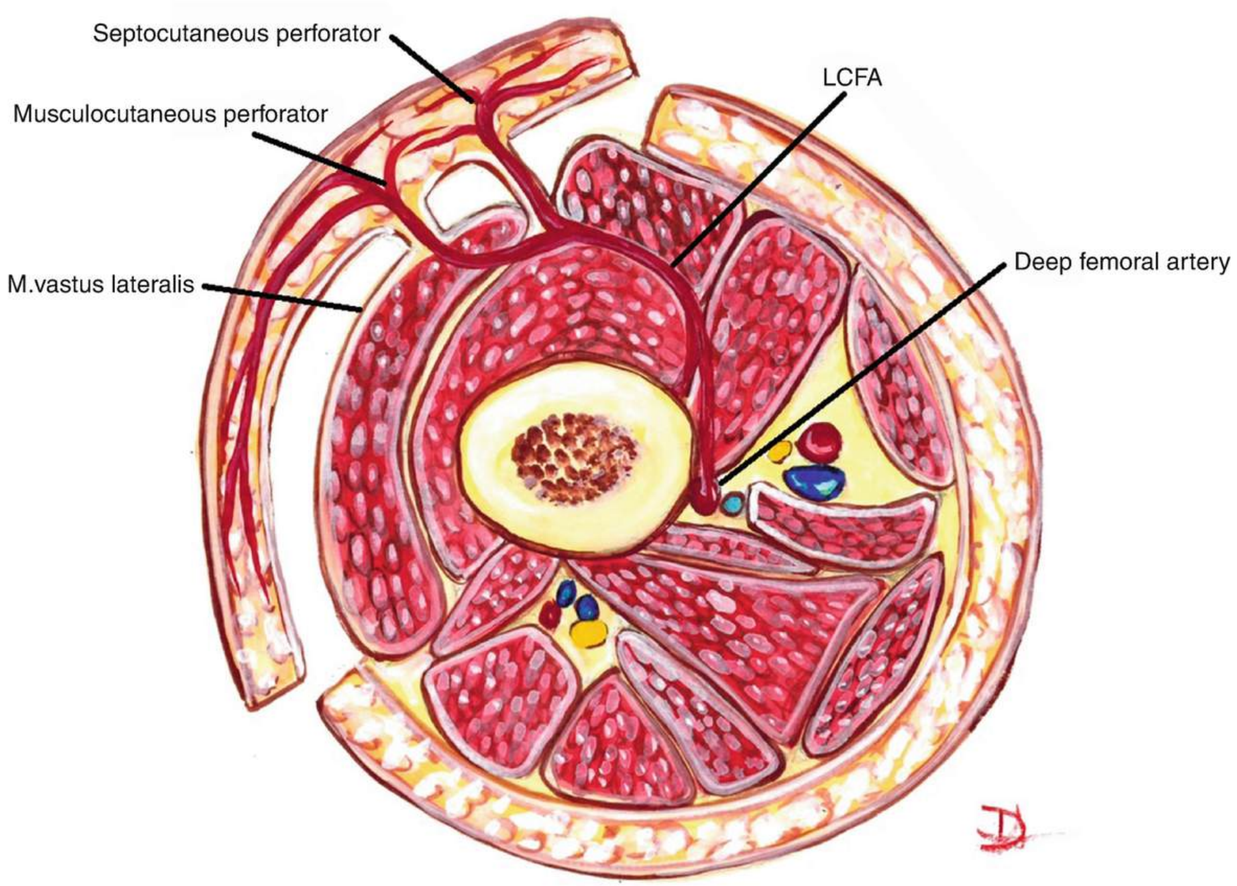


Lateral **c**ircumflex **f**emoral **a**rtery

Ascending branch

Transverse branch

OBLIQUE branch IN 30%

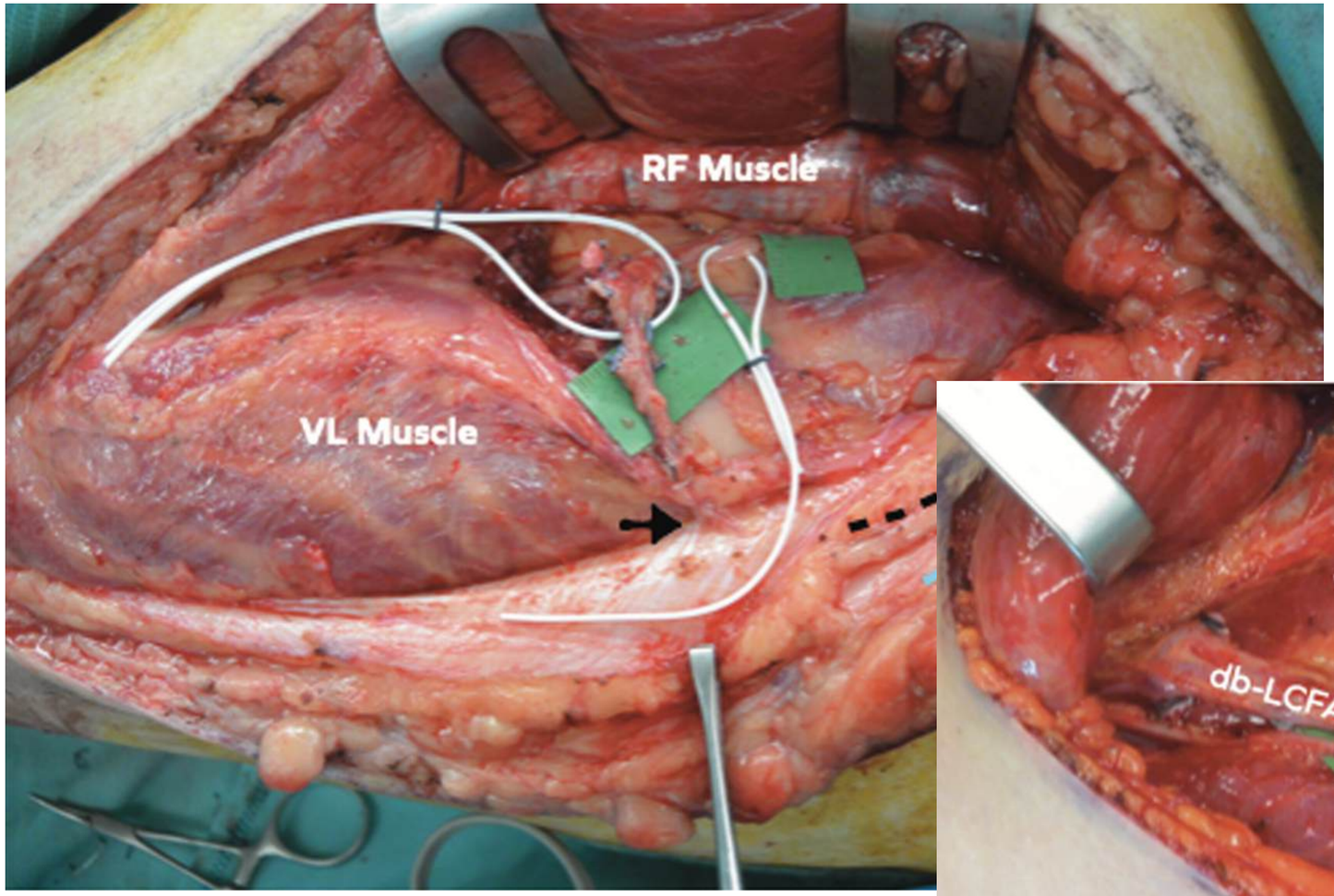
DESCENDING branch

MEDIAL branch

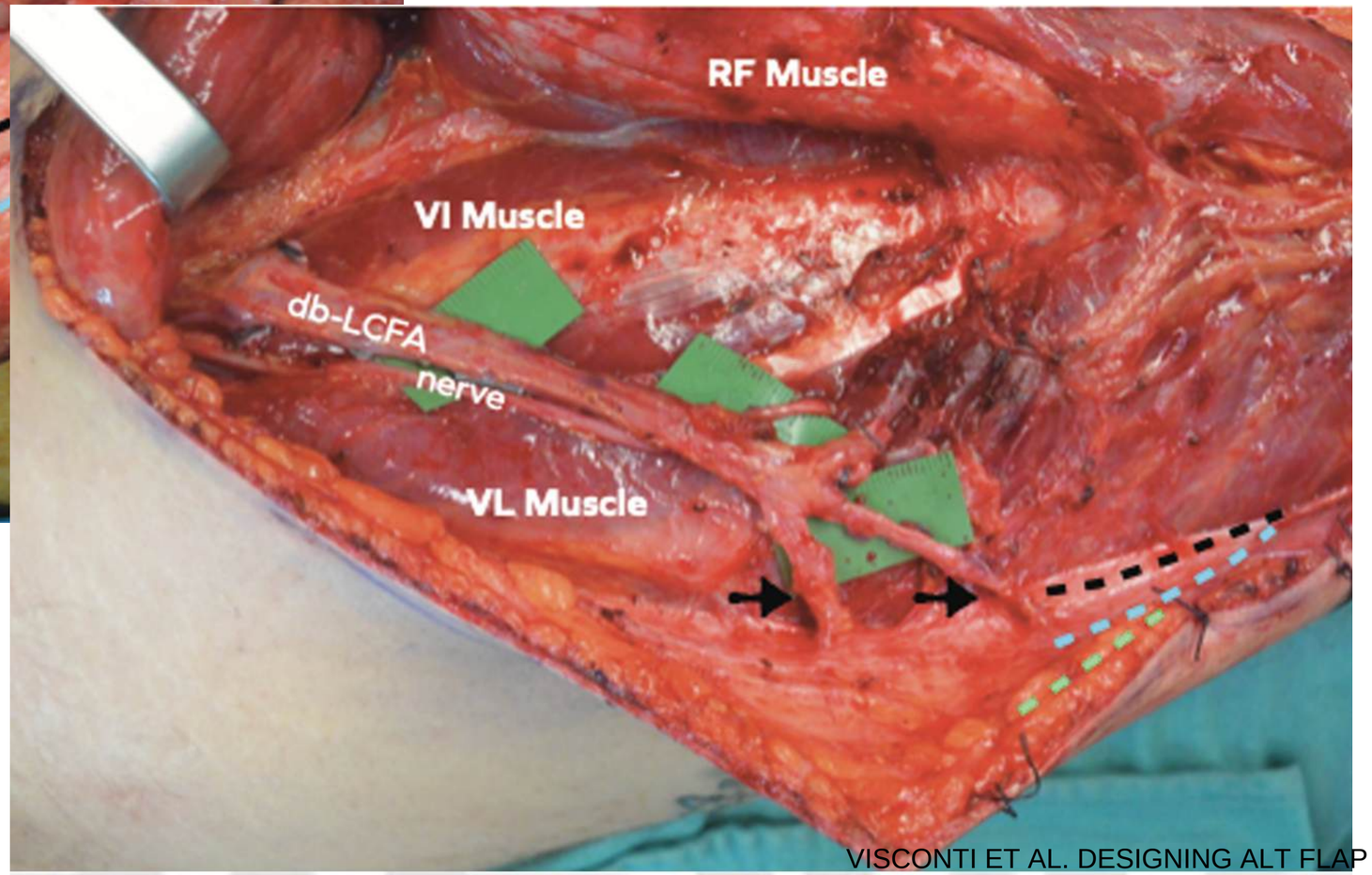
30 %

LATERAL branch

WATERSHED AREA



SEPTOCUTANEOUS
PERFORATORS
PROXIMAL & MEDIAL



MUSCULOCUTANEOUS
PERFORATORS
Distal & lateral

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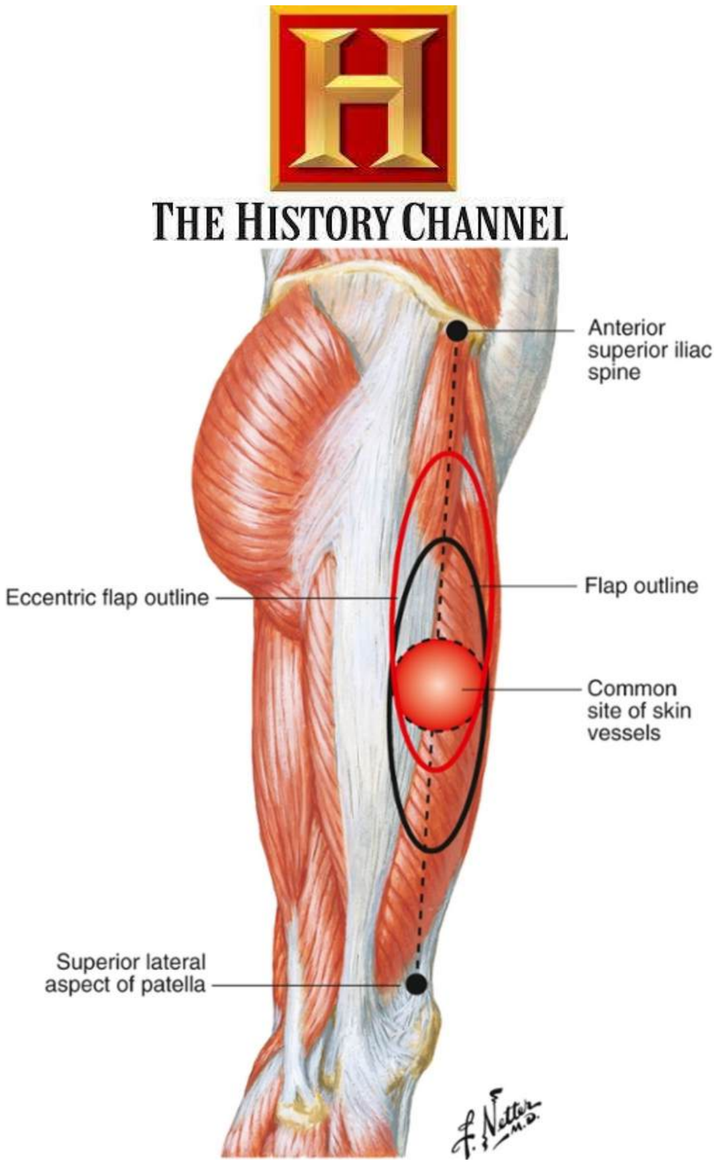
PREOPERATIVE DIAGNOSTIC ULTRASOUND



PORTABLE
HANDLED
DOPPLER

UNIDIRECTIONAL
LOW SENSITIVITY AND PECIFICITY
NO INFO ABOUT CALIBER, FLOW, COURSE
NO INFO ON SOURCE VESSEL
INTRAOPERATIVE

Designing Anterolateral Thigh Flap Using Ultrasound

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Marzia Salgarello, MD[1]

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J Reconstr Microsurg 2021;00:1–11.

Abstract[Q3]

Preoperative[Q4] knowledge of the microvascular anatomy of a patient may improve safety and efficacy and reduce morbidity.
Today[Q5], with the advancement in technology, ultrasound can provide minute details of the structures within the body, which makes this technology very helpful in preoperative evaluation of the traditional perforator flaps as well as thin, superthin, and pure skin perforator flaps.
In this article, we will describe the design of one of the most popular perforator flaps, the anterolateral thigh (ALT) flap, using high-frequency and ultrahigh-frequency ultrasound technology.

Keywords
- anterolateral thigh flap
- thin flap
- lateral circumflex femoral artery

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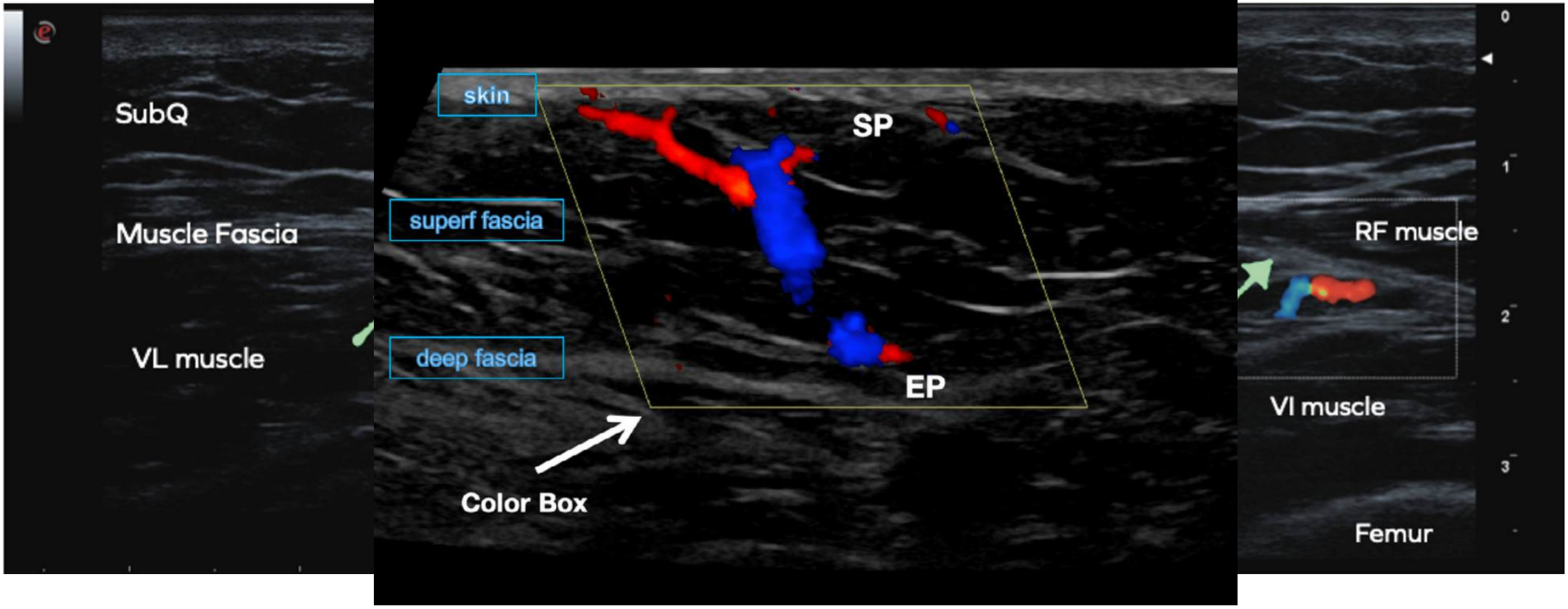
J Reconstr Microsurg 2021;00:1–11.

Abstract[Q3]

Preoperative[Q4] safety and effica



[1] Department of Plastic and Reconstructive Surgery, Università Cattolica del "Sacro Cuore," Fondazione Policlinico Universitario "Agostino Gemelli" IRCSS, Rome, Italy
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J Reconstr Microsurg 2021;00:1–11.

Abstract[Q3]

Preoperative[Q4] knowledge of the microvascular anatomy of a patient may improve safety and efficacy and reduce morbidity.

SELECTION OF THE **BEST** PERFORATORS

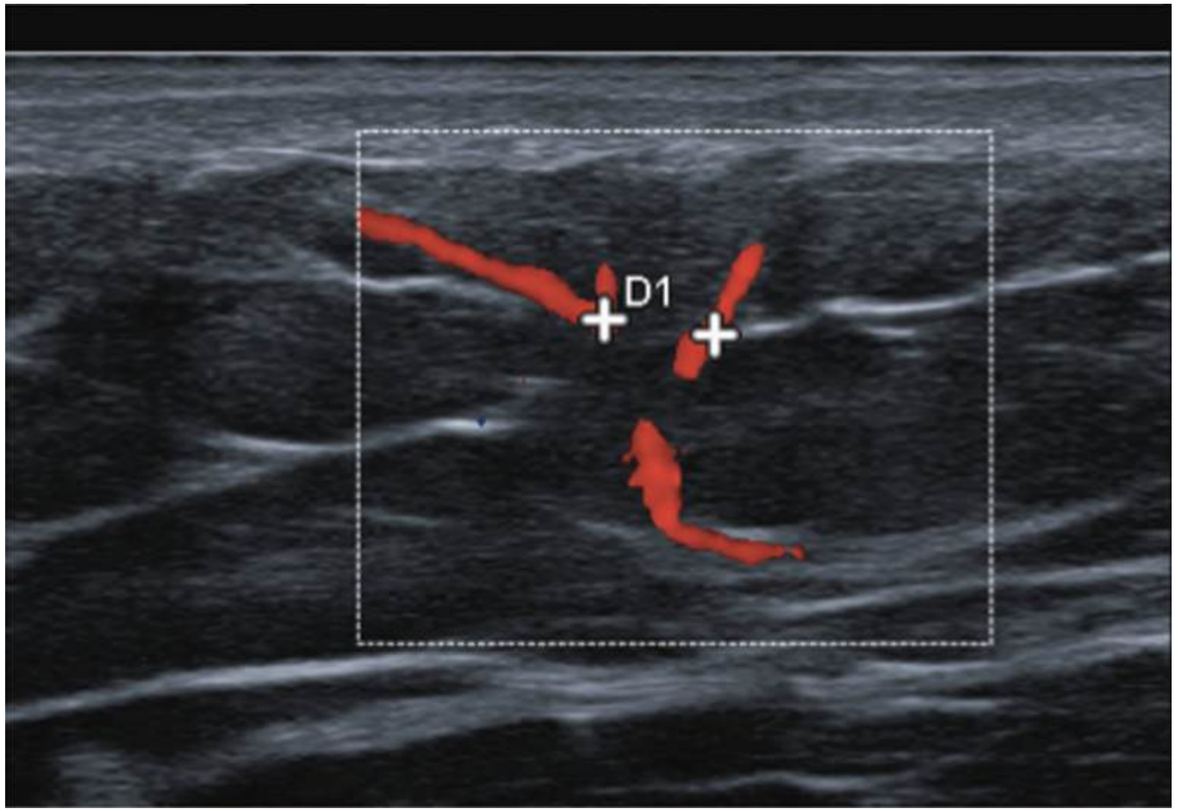
ACCORDING TO RECONTRUCTIVE **NEEDS**

LIVE VISUALIZATION OF PERFORATORS

VISUALIZE MICROVESSELS UO TP **0,2MM CALIBER**

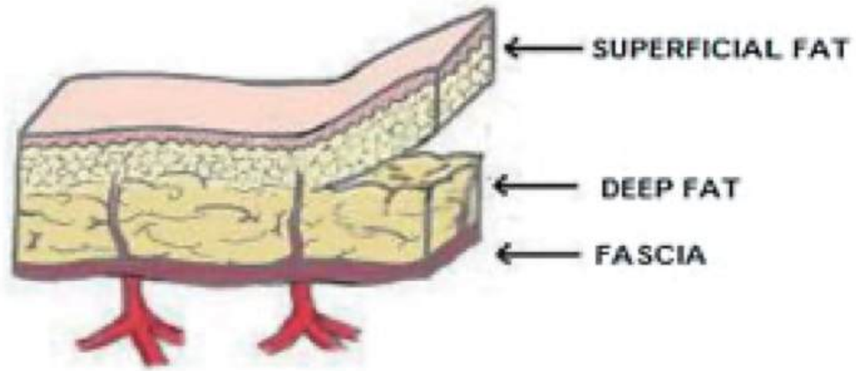
PRECISE **SUB AND SUPRAFASCIAL COURSE**

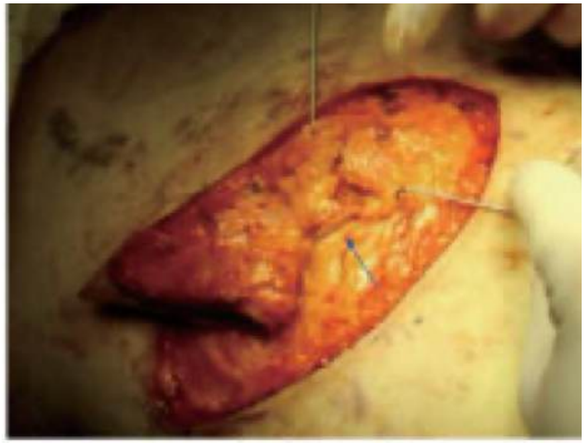
PATIENTS' CHARACTERISTICS

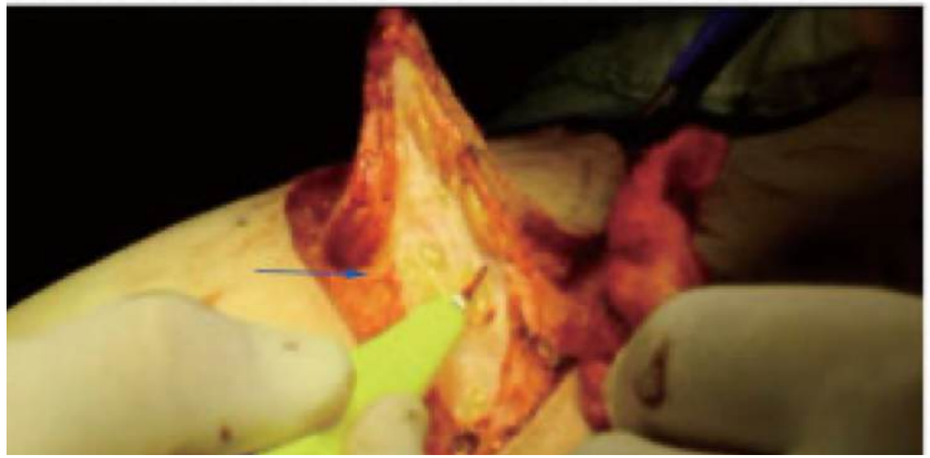


SUPRAFASCIAL, THIN, SUPERTHIN, PRE SKIN ALT FLAP

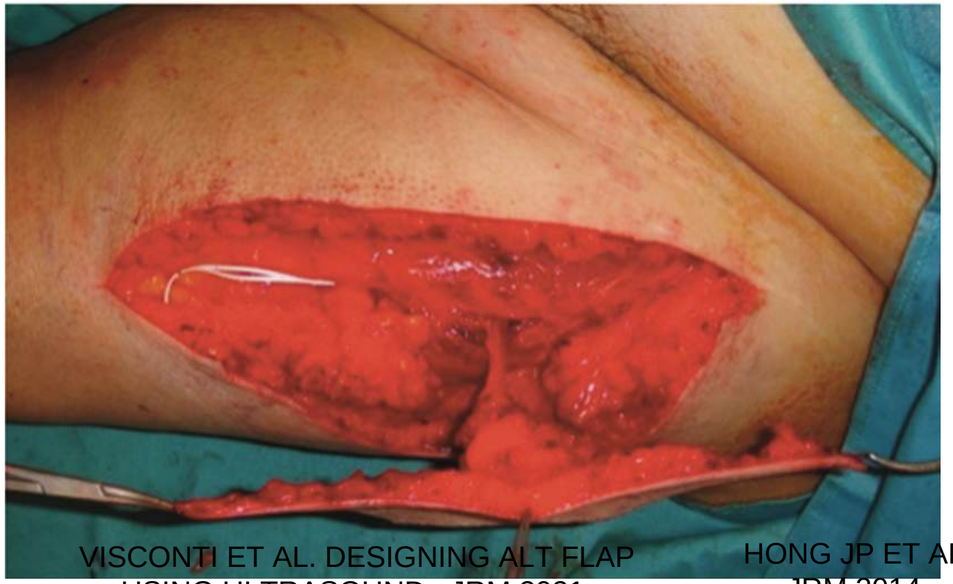
PRIMARY THINNING







SECONDARY THINNING



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HONG JP ET AL. JRM 2014.

SUPRAFASCIAL, THIN, SUPERTHIN, PURE SKIN ALT FLAP

APS
Archives of Plastic Surgery

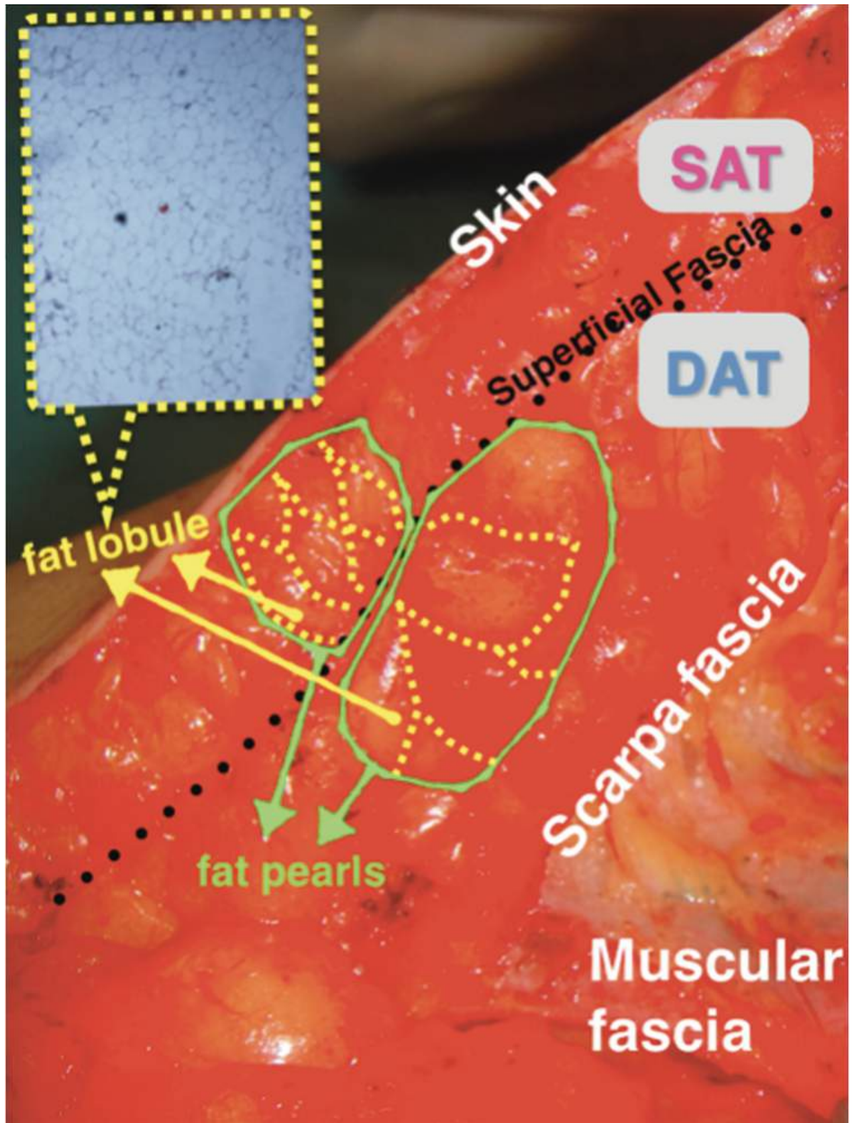
Thin and superthin perforator flap elevation based on preoperative planning with ultrahigh-frequency ultrasound

Giuseppe Visconti[1], Alessandro Bianchi[1], Akitatsu Hayashi[2], Alessandro Cina[3], Giulio Maccauro[4], Giovanni Almadori[5], Marzia Salgarello[1]

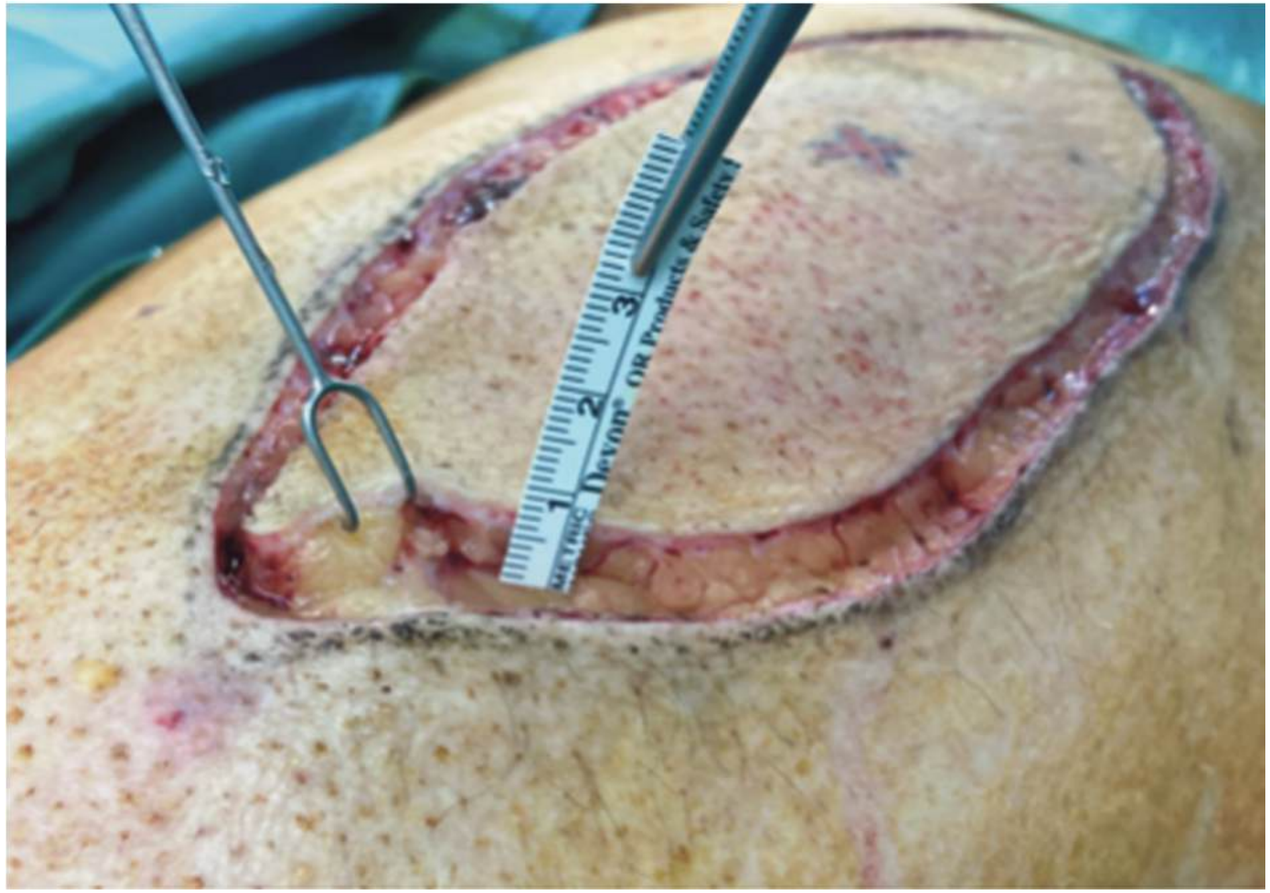
THIN FLAPS ARE ELEVATED ALONG THE SCARPA FASCIA

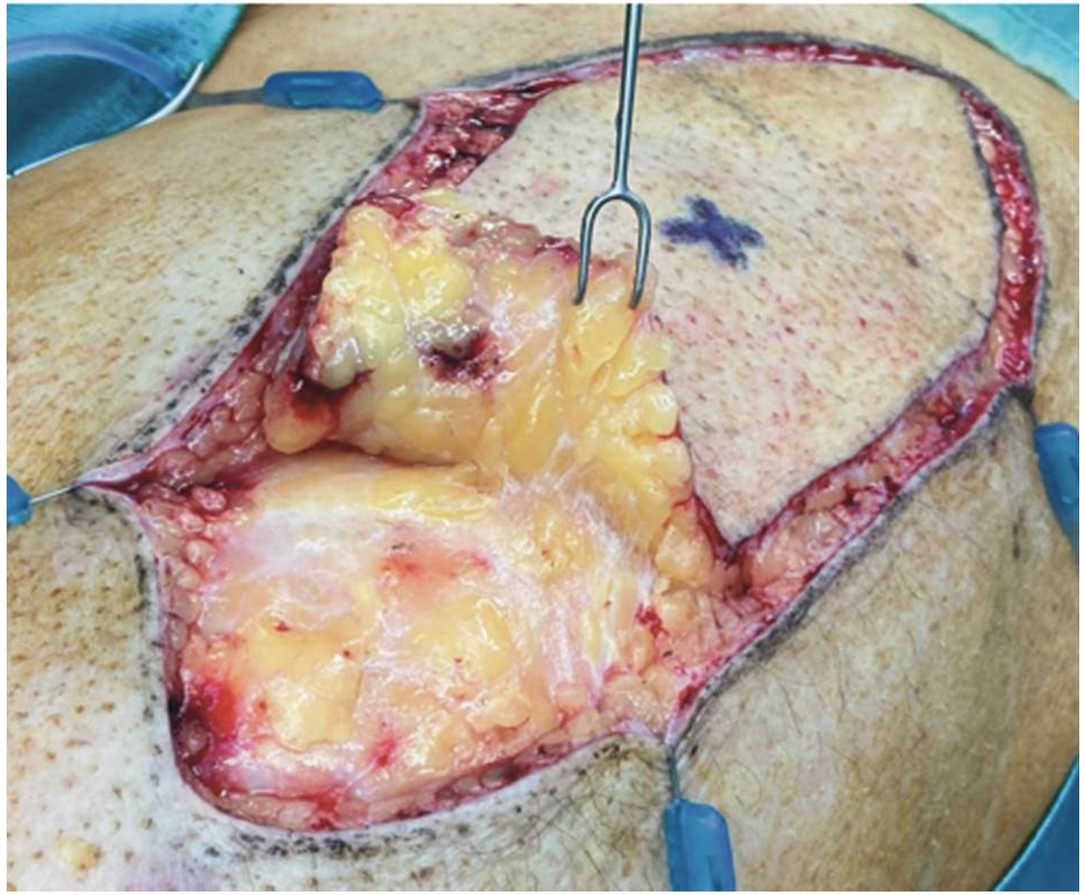
SUPERTHIN FLAPS ARE ELEVATED ALONG THE SUPERFICIALIS FASCIA

PSP FLAPS ARE ELEVATED ALONG THE SUBDERMAL PLANE



SUPERTHIN ALT FLAP





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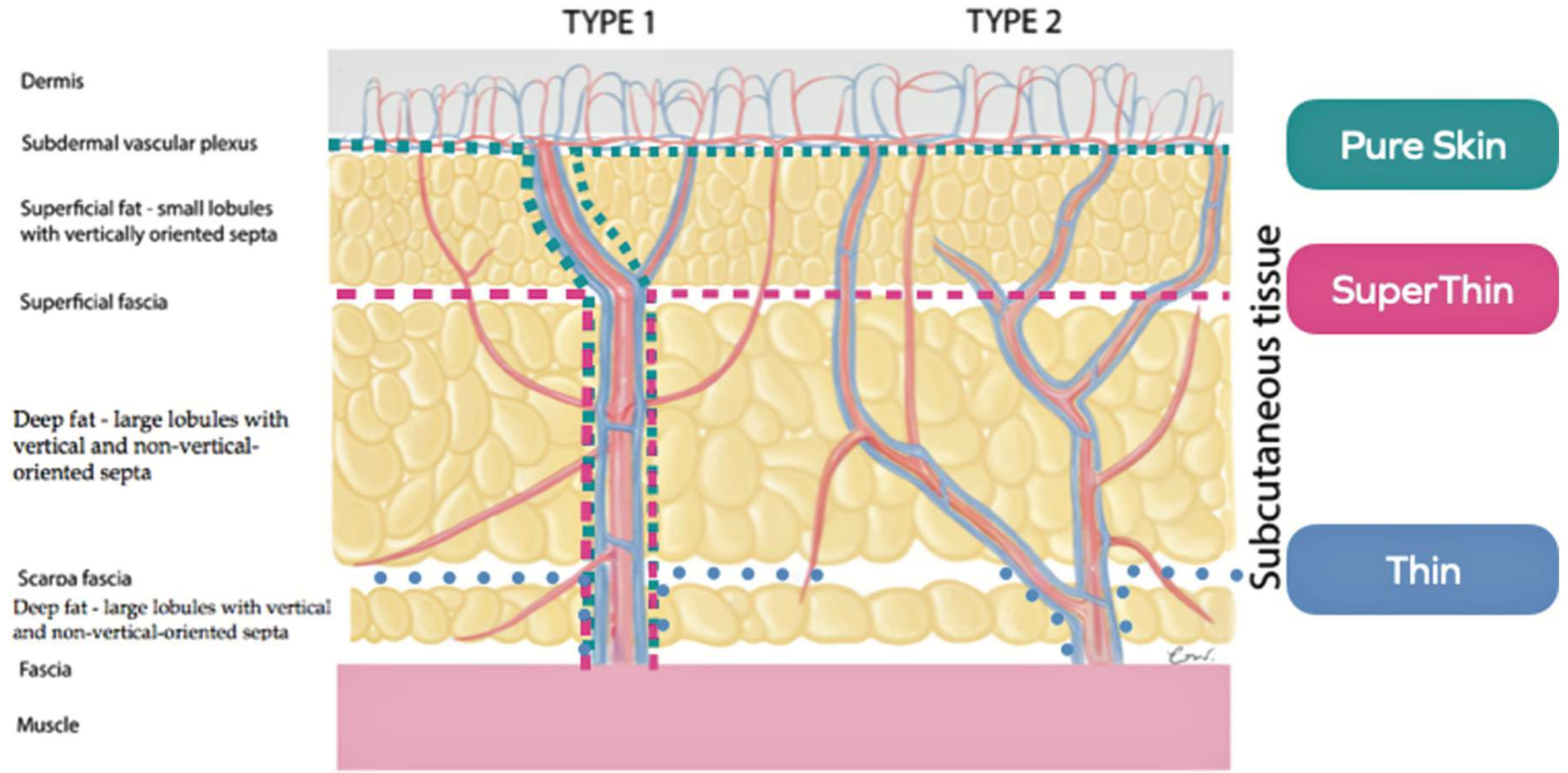

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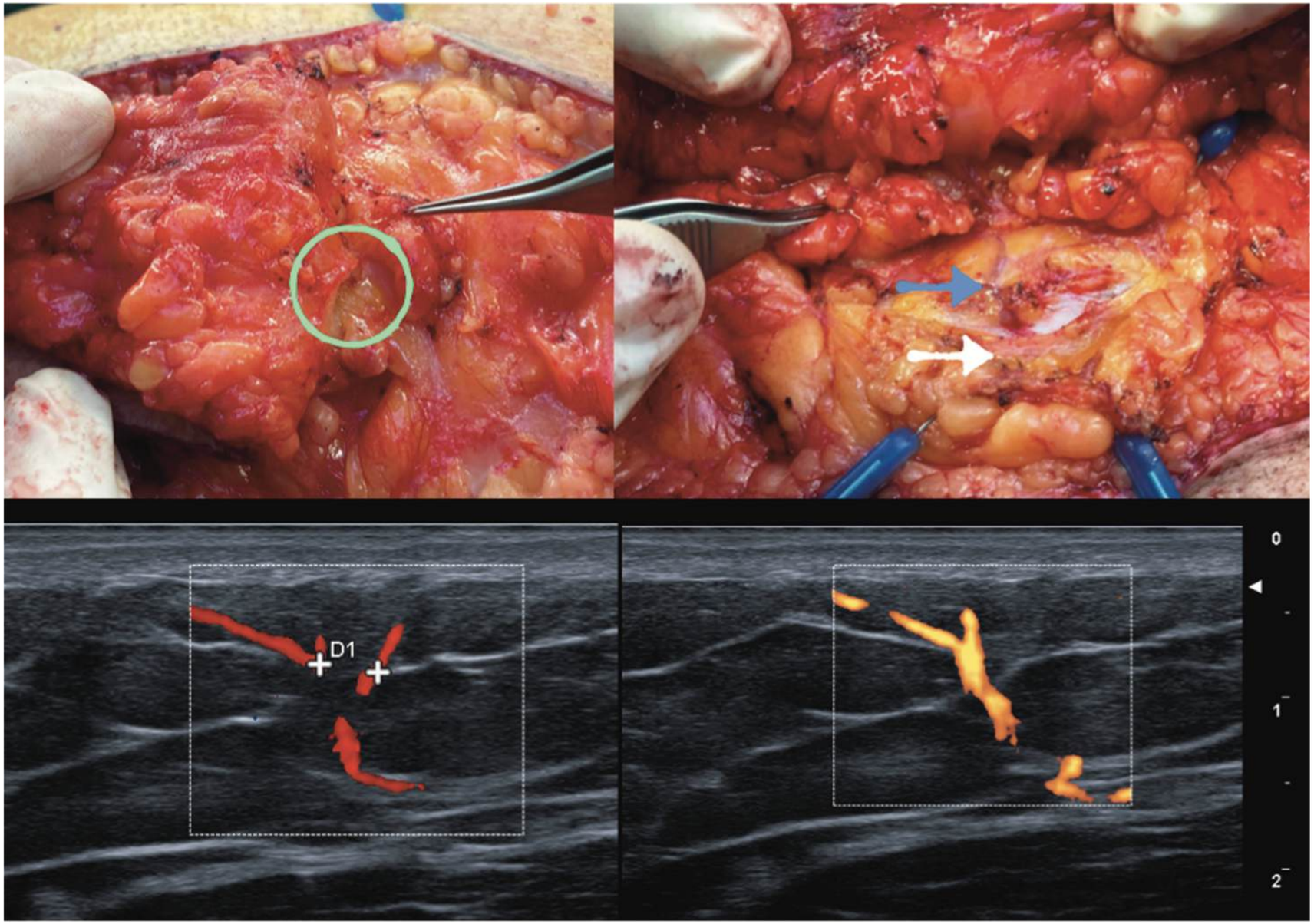
SUPERTHIN ALT FLAP



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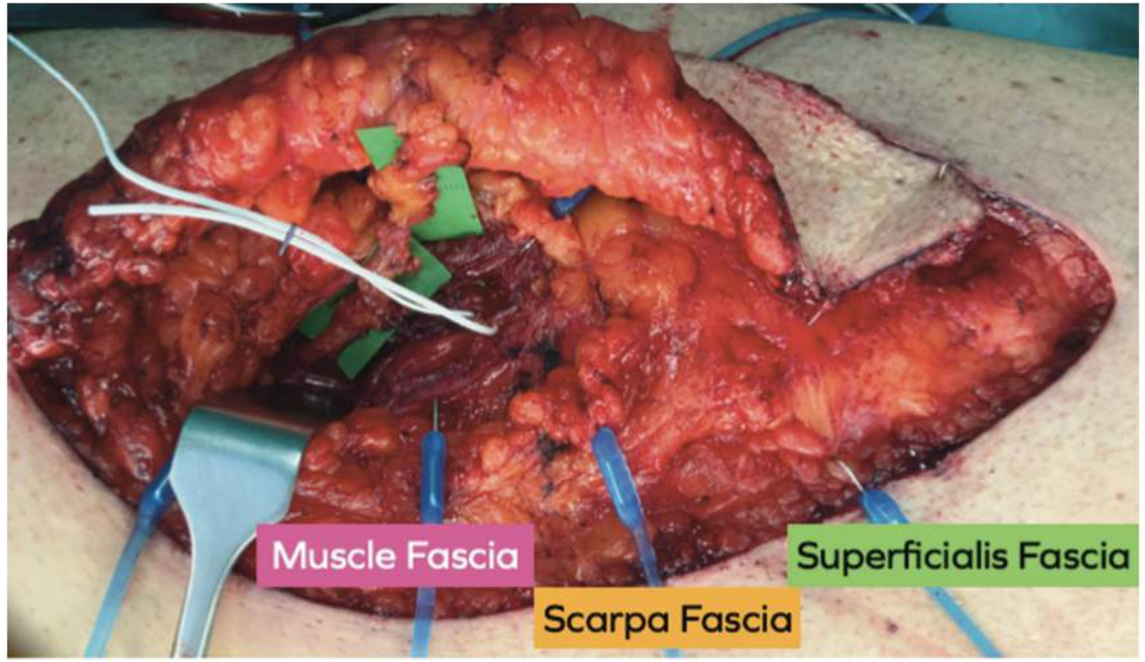
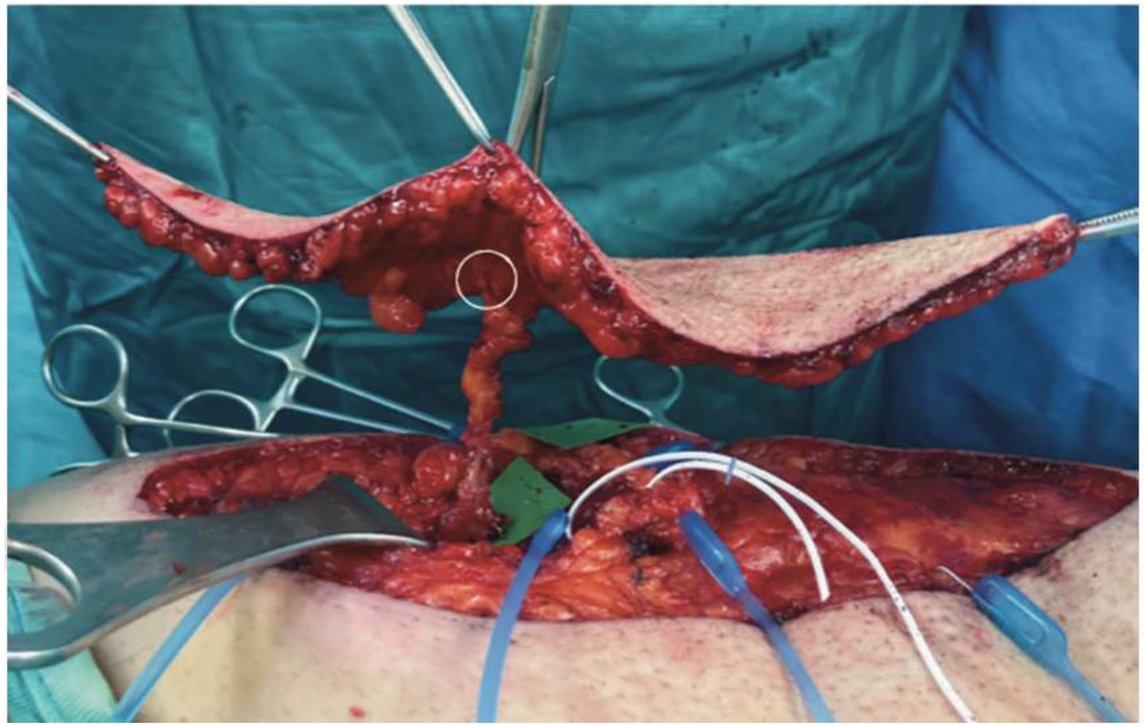
DESIGNING ALT FLAP
USING ULTRASOUND.
JRM 2021.





ULTRASOUND BASED THIN , SUPERTHING & PSP HARVEST

SAFER AND FASTER FOR PSP AND SUPERTHIN
HELPS TO CHOOSE THE BEST PERFORATOR
(OR THE BEST DONOR SITE)
REDUCE TIME FOR HARVESTING
NO EXPLORATORY INCISIONS

VISCONTI ET AL. DESIGNING ALT FLAP USING ULTRASOUND. JRM 2021.