

Global Experts Meeting on

PLASTIC AND AESTHETIC SURGERY

May 14-15, 2018 | Singapore City, Singapore

Phalloplasty with a radial forearm flap versus with an anterolateral thigh flap: A retrospective comparative study based on 413 cases

Stan Monstrey, Ingrid Vandeveldde and Salvatore D'arpa
 Plastic Surgery, Ghent University Hospital

Introduction: The anterolateral thigh (ALT) flap is a valuable alternative to the radial forearm flap (RFF) for penile reconstruction. So far no study has ever compared ALT and RFF phalloplasties. The largest series reported to date, 413 cases performed at a single institution, is analyzed to compare the two techniques.

Materials and methods: From 2004 to 2016, 413 phalloplasties were performed (320 RFF, 93 ALT). Urethral reconstruction in ALT flap phalloplasties was accomplished with a second flap or with prelamination in 94% of cases. Outcomes were compared in terms of: flap survival, fistulae and strictures, erectile and testicular implants, secondary procedures on the penis and on the donor site. A questionnaire was administered to investigate QoL and aesthetic outcomes.

Results: ALT flap phalloplasties showed statistically significant higher rates of secondary procedures in the

penis (45 vs 15 %) and at the donor site (16 vs 5 %). The RFF phalloplasty showed significantly higher early fistula rates (31.6 vs 15.2 %) and a higher percentage of patients wearing an implant (65.6 vs 42 %). Fistulas requiring surgery and stricture rates, flap revisions and prosthesis-related complications showed no statistically significant differences. The QoL questionnaire (responders: 37 RFF and 17 ALT patients) showed no statistically significant difference.

Conclusion: The ALT phalloplasty is a valuable alternative to the RFF phalloplasty that allows to avoid the extensive forearm scar. The drawbacks of the ALT are the frequent need for a second flap for the urethra and higher rates of secondary corrections at the penis and at the donor site. QoL and cosmetic outcomes were comparable for both techniques. RFF patients request an erectile implant more often since sometimes the ALT is thick and rigid enough to allow sexual intercourse without an implant.

Biography

Dr. Stan J Monstrey is a Professor of Ghent University Hospital, Belgium

stan.monstrey@ugent.be

Notes: