ORAL PRESENTATION GROUP 2 – PRESENTATION 3

Scapular Fascia Flap: An Exquisitely Thin and Pliable Reconstructive Option

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Introduction: The current era of microsurgical reconstruction enjoys a multitude of thin, pliable free flaps. Goals of reconstruction include durable and aesthetic coverage coupled with minimal donor site morbidity. In this study, we present a case series of a rarely utilized, exquisitely thin and pliable flap, the scapular fascia free flap.

Purpose: To present experience with the scapular fascia free flap in the reconstruction of various open wounds.

Methods: A retrospective review of 15 cases of reconstructions with the scapular fascia free flap performed by a single surgeon was performed.

Results: 11 reconstructions utilizing scapular fascia free flap were performed for the upper extremity, 3 for the lower extremity, and one for the trunk. One flap was chimeric, combined with two separate vascularized pieces of scapula used for simultaneous reconstruction of the soft tissue defect of the hand and two metacarpals. Thirteen flaps, including the chimeric flap, survived while two flaps failed.

In most cases, the patient is positioned in the lateral decubitus position for simultaneous access to the donor and recipient site. The wound is debrided, and the recipient vessels are identified. A 15-20cm zig-zag incision is made from the posterior axilla to the scapular tip. Dissection is brought down to the underlying muscle fascia. This fascia is raised, incorporating the transverse and descending branches of the circumflex scapular arteries to their source vessel in the triangular space. The flap is raised and brought to the recipient site. Once anastomosis and inset is complete, a split thickness skin graft is applied. Monitoring is by internal Cook doppler on the vein.

Conclusion: The scapular fascia flap is an exceedingly thin, pliable, and durable flap. It can span 15x15cm in most adult men, and can be contoured to any shape. The flap has essentially no

donor site morbidity. Limitations are a technically demanding flap harvest, short pedicle, lateral decubitus position, difficult clinical monitoring, and the need for a skin graft. In our practice, the scapular fascia flap is a common choice for small to moderate sized defects with complex contour.