

Proposed Protocol for Optimization of High-Risk Lymphedema Resections

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BACKGROUND

Late-stage lymphedema is a debilitating disease that is often impervious to conservative treatments, far beyond microsurgical options but not so advanced as to require the Charles procedure. It becomes a unique surgical challenge without a current, well-defined protocol for approaching resection. Our study reviews modifications made to a technique and aims to

define a protocol that optimizes outcomes for these high-risk lymphedematous mass excisions.



METHODS

Single institution retrospective review of 21 lower extremity resections in 7 patients performed over 10 years by two attending surgeons.



RESULTS

Substantial reduction of lymphedema was achieved in all 21 cases with only 1 recurrence requiring an additional resection 6 years later.



- All but one patients had BMI >35.
- Average incision length was 28cm.
- The complication rate was 33% (2 seromas & 6 wound dehiscence requiring another operation).



- Drains & NPWT didn't preclude complications.
- Use of LigaSure reduced operative time by 1/3.
- Pre-op bedrest (2 cases) had no complications.



PROTOCOL

PRE-OP

- Staged Approach
- Pre-admit for fluid off-loading
- Skin Hygiene

INTRA-OP

- Non-axial incisions (based instead on tissue morphology)
- Use of LigaSure
- Drains depending on defect size (if > 1kg mass)

* Currently exploring use of thrombin sealant, but this precludes drainage, so likely to be size dependent

POST-OP

- Bedrest & NPWT for 4 days
- Continued compression
- Sutures out at 3-4 weeks

DISCUSSION

- There is a dearth of literature published about lymphedema resections, which remains relatively rare and high risk for complications.
- Crucial measures have been identified to improve outcomes in our proposed protocol, such as use of LigaSure for expedient lymphostasis.

