

Leech Therapy In Digital Replantation/Revascularization. A Review of 760 Consecutive Digits

Demetrios Rizis MD, Youssef Tahiri MD, Lucie Lessard MD, John S Sampalis PhD, Julie C Kvann MD, Jane Konidis BSc, Dominique Tremblay MD, Andreas Nikolis MD MSc

Abstract

Background: The use of leeches has fluctuated greatly gaining and losing favor over time. In recent years, reconstructive surgeons have used leeches in the management of venous congestion in microvascular free-tissue transfer and replantation. (1-5) The aim of this study is to describe the Québec Provincial Replantation Program's experience with leeches in salvage of upper extremity replantation/revascularization surgery.

Methods: A retrospective review of all revascularized or reimplanted digits treated over a 5 year period in a centralized provincial replantation center was conducted. Particular attention was focused on patients in whom leech therapy was used. Indications for leech therapy, complications associated with treatment, as well as success rates were evaluated.

Results: Four hundred and eleven patients with upper extremity trauma were treated with revascularization (271) or replantation (259) for a total of 760 digits referred to the program and an overall success rate at discharge of 92.9% for operated digits. Acute complications were noted in 23.3% of digits with venous congestion being the most frequently observed (54.8% of complications). Seventy (72.2%) of the congestive digits were treated with leech therapy. All patients undergoing leech therapy were placed on prophylactic antibiotics. No infections were reported. Fifty two point two percent (52.2%) of patients that received leech therapy required one or multiple transfusions. A salvage rate of 67.1% was obtained using leeches in managing venous congestion.

Conclusions: Leech therapy is an effective modality for the treatment of non-surgically manageable venous congestion in digital replantation/revascularization. Leeches remain a useful tool in the plastic surgeon's armamentarium for the management of venous congestion.

References

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