PROXIMAL HAND AND FOREARM REPLANTATION: IMPROVING THE OUTCOMES

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Patients and Methods
- 17 cases in 5 years, AlAzhar University Hospitals, Damietta, Egypt
- Male: 14, Female: 3
- Age: 15, 56, mean: 56.4 Years
- Right: 11, Left: 6, Bilateral: None
- Ischemia time: 5-8 Hours, Mean: 5.5 Hours
- Procedures: 3 to 7 (Mean: 4)
- Total Time in Theatre: 15-56 Hours, Mean: 16 Hours
- 14 procedures: 17 Hours, Mean: 9 Hours
- Secondary procedures: 3-6 (Mean: 4.6 procedures)
- Pts. 14-46/12, Means: 26/12
- Outcomes measured in DASH

Sequence
- Vascular shunt: Femoral / Umbilical catheter, Heparin, 20 min. infiltrated: Wash incision
- Clamps on arteries
- Octah. Suture ligating & dividing arteries
- 2 arteries repair intraluminal or straight
- Muscle flap: DIEP, RL, Quad, Deltopectoral, RE, pedicled LL, cover the tendons for grafts
- At least 2 veins (5-3) average 3.6
- Fasciotomy, grafts taken
- Suture skin incision, followed by sutures from week 2
- Hand work out in 6 weeks

Outcomes:
- 14: Successful replantation (100% from the both)
- But functional success 100%
- 2 case developed wound healing problems and tendon rupture, and required extra procedures
- Overall patient satisfaction was excellent
- Have no experience with the new generation of prosthetic hands to compare the outcomes
- Our results are compatible with previous reports on replantation/revascularization

Conclusion
- Successful proximal replantation requires prompt interventions, early secondary procedures once vascularity is established and early mobilization
- No difference from distal replantation apart from the vessels are bigger and neater
- Muscle recession and subsequent tendon failure risk can be minimized by early detachment of semi-exposed muscles
- Cheaper, cost-effective service can be provided anywhere with comparable/acceptable outcomes