- Muster fürs Abspreichern –

Ying Zhang

Dr. Med.

EVIDENCE, STATE-OF-THE-ART AND OUTCOME OF SOFT TISSUE AND COMPOUND FREE FLAPS IN MICROSURGICAL UPPER AND LOWER EXTREMITY RECONSTRUCTION

Fach/Einrichtung: Chirurgie

Doktorvater: Prof. Dr. med. Christoph Hirche

1. Soft tissue free flaps to the upper extremity have comparable success rates, but higher perioperative complication rates (e.g. partial flap loss, infection and wound dehiscence compared to lower extremity reconstruction. The ALT is the workhorse flap in both upper and lower extremity soft tissue reconstruction.

2. Compound bone free flaps are performed equivalently in upper and lower extremity reconstruction, but higher complications rates are found in lower extremity reconstruction (e.g. partial flap loss, artery thrombosis, infection and hematoma). Osteocutaneous fibula flaps are the workhorse flap in both upper and lower extremity soft tissue and bone reconstruction.

3. Compound flaps with muscular components have the potential to increase the flap success rate and decrease perioperative complication rates (e.g. venous thrombosis and infection, but not wound dehiscence). Compound flaps with bone components tend to decrease flap success rates and increase perioperative complication rates (e.g. arterial, especially venous thrombosis, hematoma)

4. The compound bone flaps for upper and lower extremity reconstruction in the original outcome study have comparable perioperative outcome and improved long-term results.

5. Based on the original data, perioperative heparin usage may decrease the long-term complication (e.g. non-union, postoperative osteomyelitis) of compound bone flaps, but increase the risk of hematoma when patient require increased dosage of anticoagulation.

6. Based on the original data and the cohort study, compound flaps with bone components may increase the risk of venous thrombosis and hematoma. But the compound bone flaps still are essential to be conducted for the optimal functional results.