Universität Basel

Publication

Arteriovenous Loops Enable Free Tissue Transfer With Otherwise Inadequate Local Donor and Recipient Vessels

Free flap reconstruction with damaged or diseased vessels is a challenging problem. We describe our case series using an arteriovenous loop or bypass surgery with free flaps for complex defect reconstructions at the lower extremity and the pelvic region.; In this single-center retrospective cohort study 11 consecutive patients (mean age=73 years, range=53-88 years) were operated on, between June 2016 and August 2018. Patients were reconstructed with free gracilis flaps (n=8), free latissimus dorsi flap (n=1) and chimeric scapular flap (n=1), respectively.; The mean loop length was 30 cm (range=12-40 cm). The loop/bypass revision rate was 27% (3/11), and the overall flap loss rate was 20% (2/10). After a mean follow-up time of 17 months (range=12-24 months), the limb salvage rate was 75% (6/8).; We successfully reconstructed complex defects with poor recipient vessels using arteriovenous loops or bypass surgery and free flaps.