

10 YEAR OUTCOME OF PAEDIATRIC REIMPLANTATION AND REVASCULARIZATION IN HOSPITAL SELAYANG

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Introduction: Paediatric Digital Amputation and Near total amputation is relatively uncommon trauma as compared to adults. However, the healing potential and minimal associated comorbidities confer the paediatric patients inherent better survivability and outcome. The demographics of this injury is not well documented as the number of cases are low. This presentation will discuss the challenges and share tips and techniques in addressing this challenging clinical scenario.

Methodology: This is a retrospective study with data extracted from the computerized Medical Record database of Hospital Selayang. Keywords used for extraction of patient data were upper limb amputation, finger amputation, hand amputation, revascularization surgery, reimplantation surgery, and finger tip injuries. Data were collected for ten year period from 1st of January 2010 till the 31st of December 2020. The demographics of the patient were recorded. The surgical intervention type and complexity is recorded. The immediate outcome of the replantation/revascularization and long term outcomes were also recorded.

Discussion: 56 subjects met the inclusion criteria. Most were Male (n = 39, 69.6%) with the median age 6.8 years (IQR: 2.8, 11.1). The most common mechanism of injury is blunt trauma accounting for nearly a quarter of the subjects (n = 40, 71.4%). Initial operations were primary artery repair (n = 22, 39.3%) vein graft (n = 3, 5.4%) and primary amputation (n = 1, 1.8%). The immediate outcome of the surgical intervention is excellent with a majority with either good or excellent results (n = 55, 98.2%). The long term outcome is also excellent with a reported good or excellent result (n = 51, 91.1%).

Conclusion: The reimplantation and revascularization procedure in this population is challenging and technically demanding. However the result of the surgery and the functional outcome are highly favorable. The principles of surgery is therefore unique and specific to paediatric population.