Comparison of Prosthetic Treatment Outcomes for Proximal Femoral Focal Deficiency

Prosthetic options for proximal femoral focal deficiency (PFFD)



Equinus prosthesis



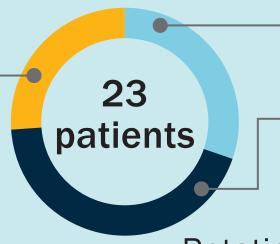
Above-the-knee prosthesis after a Syme or Boyd amputation



Rotationplasty prosthesis

Previous reports suggest superior results in comparison to others

Pediatric patients with unilateral PFFD



Equinus prosthesis: 7

Above-the-knee prosthesis: 10

Rotationplasty prosthesis: 6



Gait analysis



Oxygen consumption testing



Survey on patient-reported outcomes (pain, function, happiness)



Rotationplasty group patients underwent more procedures than the others



No significant differences in oxygen consumption between groups



Equinus group patients walked faster than the others



Above-the-knee prosthesis group patients had much greater knee range of motion than the others



All groups had Gait **Deviation Index scores** >3 standard deviations below normative values



No significant differences in patient-reported outcomes

Rotationplasty provided no patient-reported or functional benefits over the other prosthetic options; considering the marked variability in PFFD anatomic deficiencies, the best treatment choice must be individualized via a patient-physician discussion

Comparison of Outcomes by Reconstructive Strategy in Patients with Prostheses for Proximal Femoral Focal Deficiency







Floccari et al (2021) | DOI: 10.2106/JBJS.20.02001