

Dr. Mark Camp

“Decreasing unnecessary orthopaedic, orthopaedic technology, and radiology visits for paediatric femoral shaft fractures managed with spica casts”

The usual treatment for femur fractures in children is a body (spica) cast. This cast is applied in the operating room and typically made out of rigid fibreglass tape. The cast is kept on until the fracture heals, which takes between 4-6 weeks. The cast is removed by an orthopaedic technologist using a cast saw.

Parents in Canada have to travel great distances to be treated at special paediatric hospitals. New casting techniques allow casts to be split while the patient is asleep in the operating room with the cast then overwrapped with semi-rigid fibreglass tape. This technique would allow for removal of the cast without the need of an orthopaedic technologist nor a cast saw.

This study will explore the necessity of x-rays at the time of cast removal, the safety of the new casting technique, and the ease of cast removal by parents after the fracture has healed.

Based on this study, future patients may not need to return to paediatric hospitals for treatment after their initial cast application which will decrease the financial and time burden on families and the healthcare system without impacting patient results.