

Long-Term Outcomes for Extendable Endoprostheses



Extendable endoprostheses are a useful treatment modality after bone resection for sarcoma in children



Extendable endoprostheses

However, studies are still needed to determine long-term outcomes

124 skeletally immature children



Extendable endoprosthetic replacement

Follow-up 10–36 years

Implant survival

Complications

Advantages



✓
Limb salvage
91%



✓
Mean limb length discrepancy
1 cm

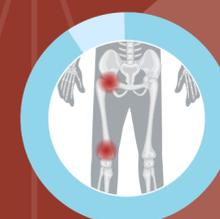


✓
Musculoskeletal Tumor Society functional score
82%

Disadvantages



✗
10-year failure rate
28%



✗
Complication rate
90%



✗
Mean surgical procedures per patient
2.7

Proximal part of the femur

77%
Soft-tissue failure

Distal part of the femur

52%
Aseptic loosening

55%
Structural failure



Despite high complication rates and a need for additional surgical procedures, extendable endoprostheses in children are a reliable option for limb-length restoration, limb salvage, and long-term function

Extendable Endoprostheses in Skeletally Immature Patients: A Study of 124 Children
Surviving More Than 10 Years After Resection of Bone Sarcomas

Tsuda et al. (2020)

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