Primary Total Hip Arthroplasty (THA) In A Below Knee Amputee With Neck Of Femur Fracture (NOF) Allows Early Ambulation

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INTRODUCTION:
THA in below knee amputees is rare and provides unique challenges.

MATERIALS & METHODS:
A 52 year old lady had a below knee amputation (BKA) in 2015. Post-operatively she was ambulating using a prosthesis. In 2017, she fell and sustained a left neck of femur fracture (NOF). She underwent primary hybrid THA via a Southern approach.

RESULTS:
She was able to ambulate using her prosthesis and a walking frame on day 3 post surgery. There were no dislocations or wound complications. Harris hip score at 6 months post surgery was 87. Follow up radiographs show no signs of infection.

DISCUSSION:
NOF in BKA patients should be treated with primary arthroplasty due to:

1. High failure rate in patients who underwent fixation due to altered lower limb biomechanics [1]
2. THA allows early ambulation with prosthesis and return to pre-fracture function [1]

Challenges:
1. Increased recruitment of hip abductors in amputee gait [3] lead us to choose an approach that avoided abductor injury (Southern approach)
2. Osteopenia in the amputated limb [4] may lead to early failure with cementless stems
3. Positioning and maneuvering of the short stump during dislocation/reduction and stem positioning

CONCLUSION:
Primary THA in BKA patients with ipsilateral NOF using a Southern approach allows good exposure, implant positioning and early rehabilitation while avoiding abductor injury and preempting fixation failure and hip OA.

REFERENCES: