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Prosthesis Design for Bilateral Hip Disarticulation Management

Authors : Mauricio Plaza, Willian Aperador

Abstract : Hip disarticulation is an amputation through the hip joint capsule, removing the entire lower extremity, with a closure of the remaining musculature over the exposed acetabulum. Tumors of the distal and proximal femur were treated by total femur resection; a hip disarticulation sometimes is a performance for massive trauma with crush injuries to the lower extremity. This article discusses the design a system for rehabilitation of a patient with bilateral hip disarticulations. The prosthetics designed allowed the patient to do natural gait suspended between parallel articulate crutches with the body weight support between the crutches. The care of this patient was a challenge due to bilateral amputations at such a high level and the special needs of a patient mobility.

Keywords : amputation, prosthesis, mobility, hemipelvectomy
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