

以保留固定良好股骨柄或髖臼杯的方式，治療人工髖關節感染 O-027
Retaining the Well-Fixed Stem or Cup in Dealing with Infected Total Hip Arthroplasty

陳昆暉¹ 陳威明^{1,2} 吳博貴^{1,2} 江昭慶^{1,2} 黃清貴^{1,2} 劉建麟^{1,2} 陳天雄^{1,2}
台北榮民總醫院骨科部¹ 國立陽明大學醫學院骨科學科²

Introduction: The gold standard for treatment of infected total arthroplasty has considered being “Two-stage reconstruction” with removal all the implant and reimplantation after infection controlled. However, during removal of the well-fixed stem or cup, trochanteric osteotomy and extensive soft tissue dissection may be required, which may lead to sequestrum formation and subsequent osteomyelitis. Huge bone loss may also happen to make reimplantation difficult. We want to evaluate whether the infected total hip arthroplasty can be treated without removal of the radiographically and clinically well-fixed femoral stem or acetabulum cup.

Materials and Methods: Patients who had an infection after total hip arthroplasty but with a radiographically well-fixed cementless stem or cup were treated. During the first stage surgery, we retained the stem or cup if failure of removal by using a stem or cup extractor. Antibiotics impregnated cement spacer was then implanted. After control of infection (CRP within normal value), we performed the second-stage reimplantation surgery. Failure of treatment was defined uncontrolled infection requiring resection of the retained stem or cup

Results: From Jan. 2004 to Dec. 2012, there were 16 patients (9 men, 7 women, 16 hips) undergoing the partial resection protocol by single surgeon at Taipei Veterans General Hospital. 12 patients (75%) had a satisfactory outcome with a mean follow-up time of 2 (0.5 to 4.2) years. The other 4 patients had uncontrolled infection requiring further resection surgery. At the same period, “Two-stage reconstruction” was performed in 47 patients with a success rate of 91.5%.

Discussion and Conclusion: “Two-stage reconstruction” had higher successful rate. However, considering the bone loss, NHI cost, and recovering time, the stem-retaining 2-stage reconstruction could be a treatment strategy for the infected total hip arthroplasty with a radiographically and clinically well-fixed femoral stem or cup

Comparison of Computed Tomography and Plain Radiography in Evaluation for O-028
Fracture of Pelvic Ring

黃柏樺 王世杰 許弘昌
中國醫藥大學附設醫院 骨科部

Introduction: The diagnosis of pelvic ring fractures is challenging with a significant variations in evaluation between computed tomography and plain radiography. This may lead to increased displacement and instability or late neurologic injury. This article described the clinical features of a population of patients with fractures of pelvic ring and compared the radiographic evaluation between computed tomography and plain radiography.

Materials and Methods: From January 2010 to December 2012, 232 patients with pelvic ring injury including pelvic, acetabular and sacral fracture were enrolled. All patients received complete imaging study including plain radiography and computed tomography. Radiographic evaluation focused on anatomic location of the fracture. Variations between computed tomography and plain radiography were evaluated. Besides, trauma mechanism and clinical presentation were evaluated.

Results: 120 patient with pelvic fracture group P, n=120), 5 patients with pelvic and sacral fracture (group P+ S, n=5), 99 patients with acetabular fracture (group A, n=99), 3 patients with acetabular and sacral fracture group A+ S, n=3) and 5 patients with isolated sacral fracture (group S, n=5) were identified. In 13 patients with associated or isolated sacral fracture, 3 sacral fractures were detected on the pelvic inlet and outlet views of radiographs, and the other 10 sacral fractures were identified on computed tomography.

Discussion: The diagnosis of pelvic ring fractures can be challenging, especially in sacrum, resulting in missed or delayed diagnosis of the injury. Pelvic inlet and outlet radiographs are recommended as additional studies to improve visualization of the sacrum in any patient with a suspected pelvic ring injury. Several radiographic indicators of potential sacral fractures were identified, such as a stepladder sign indicative of anterior sacral foraminal disruption. Computed tomography of the pelvis/sacrum can provide significant information about fracture pattern.