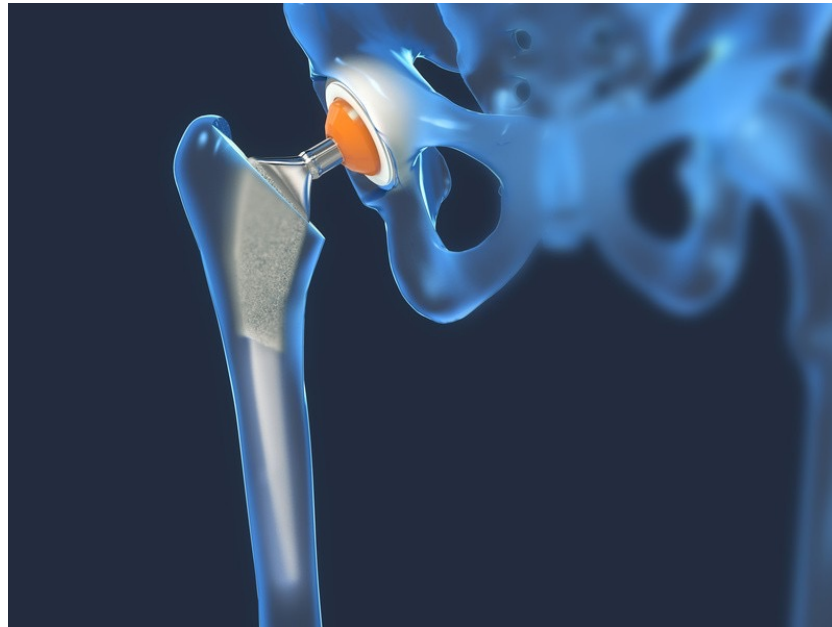


Reprises de prothèse totale de hanche (2^{ème} partie)



Objectifs d'apprentissages

- Dernières recommandations dans le traitement des **fractures périprothétiques** (*post-opératoires*)

Classifications, tip & tricks, indications techniques

Epidémiologie fractures péri-prothétiques de hanche

Taux à 2 ans de **0,49 %**

Taux à long terme ~ **3,5 %**

- Non cimentée (5.4%), souvent précoces (< 6 mois)
- Cimentée (0.3%), souvent tardives (> 5 ans)
- Après une revision (4%) vs primaire (1%)
- **Autour de la tige principalement, 2^{ème} cause de révision à court terme et 3^{ème} à long terme**

Fractures péri-prothétiques de hanche

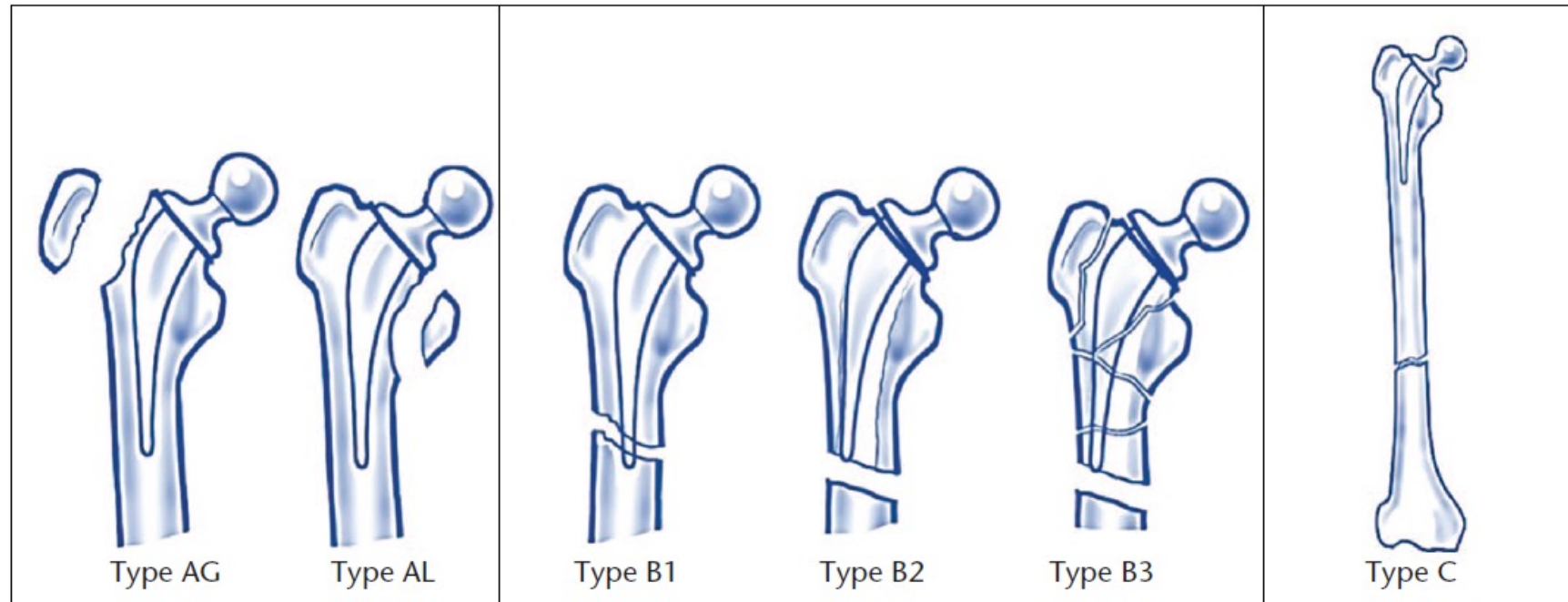






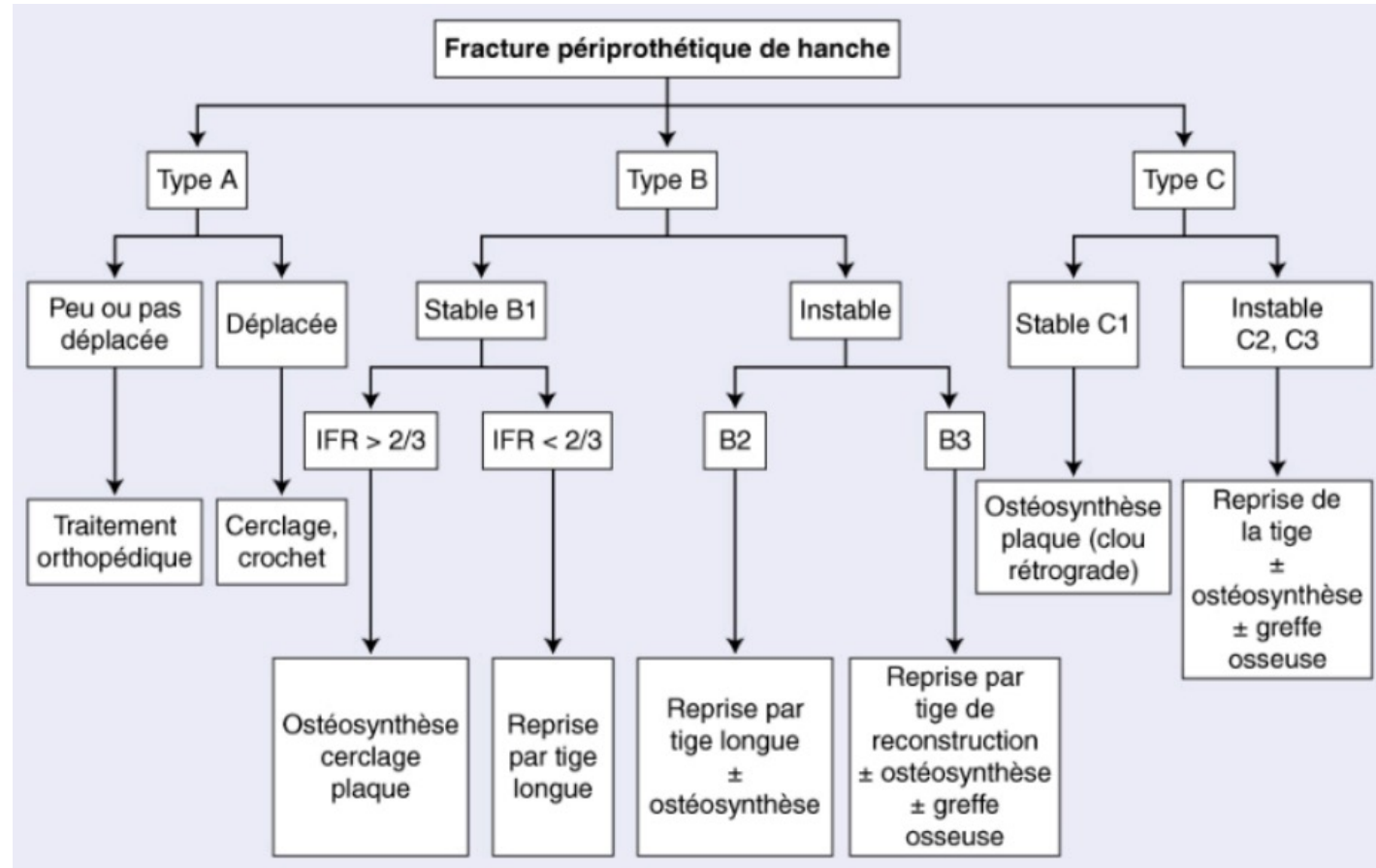
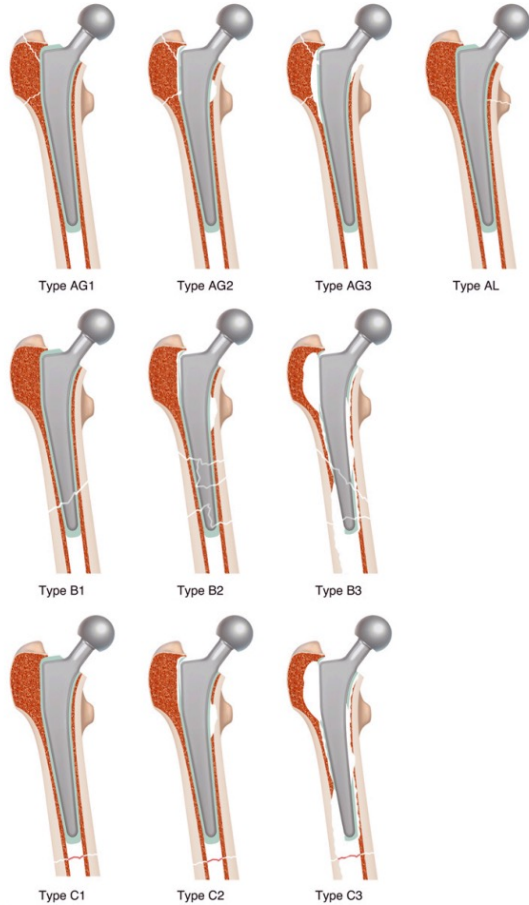


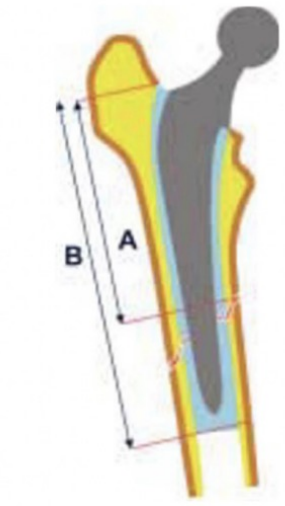
Fig. 1 The Vancouver classification: AG, greater trochanter fracture; AL, lesser trochanter fracture; B1, fracture around the tip of prosthesis-stable implant; B2, fracture associated with unstable femoral implant; B3, fracture associated with unstable femoral implant and poor bone stock; C, fracture below the tip of the femoral component.¹⁴²

Vancouver Classification & Treatment - Postoperative Periprosthetic Fracture			
Type	Description	Treatment	
AG	Fracture in greater trochanteric region. Commonly associated with osteolysis. AG (greater trochanter) fractures caused by retraction, broaching, actual implant insertion, previous hip screws.	Often requires treatment that addresses the osteolysis. AG fractures with < 2cm displacement, treat nonoperatively with partial WB and allow fibrous union. AG fractures >2cm needs ORIF (loss of abductor function leads to instability) with trochanteric claw/cables	
AL	Fracture in lesser trochanteric region.	AL fractures are commonly treated non-operatively	
B1	Fracture around stem or just below it, with a well fixed stem	ORIF using cerclage cables and locking plates	
B2	Fracture around stem or just below it, with a loose stem but good proximal bone stock △△△△△ ?? ? ? ? ?	Revision of the femoral component to a long porous-coated cementless stems and fixation of the fracture fragment. △△△△△△△△ Revision of the acetabular component if indicated ?? ? ? ? ?	
B3	Fracture around stem or just below it, with proximal bone that is poor quality or severely comminuted ?? ? ? ? △△△△△ ?? ? ? ? △	Femoral component revision with proximal femoral allograft (APC) or proximal femoral replacement (PFR) △△△ ?? ?	
C	Fracture occurs well below the prosthesis	ORIF with plate (leave the hip and acetabular prosthesis alone)	

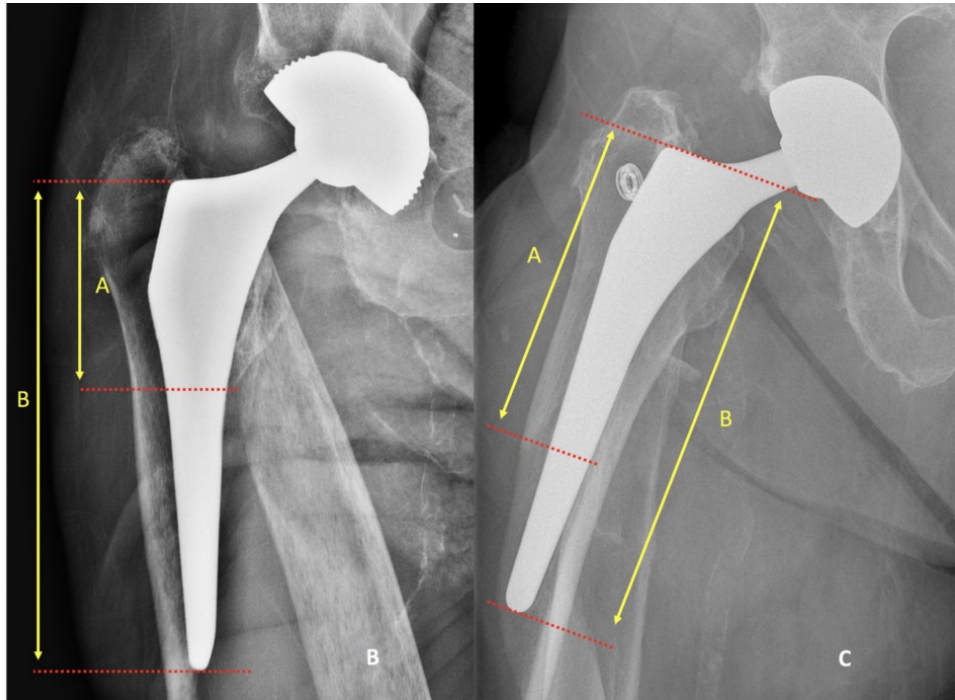
Fractures péri-prothétiques de hanche



Index de fixation restante

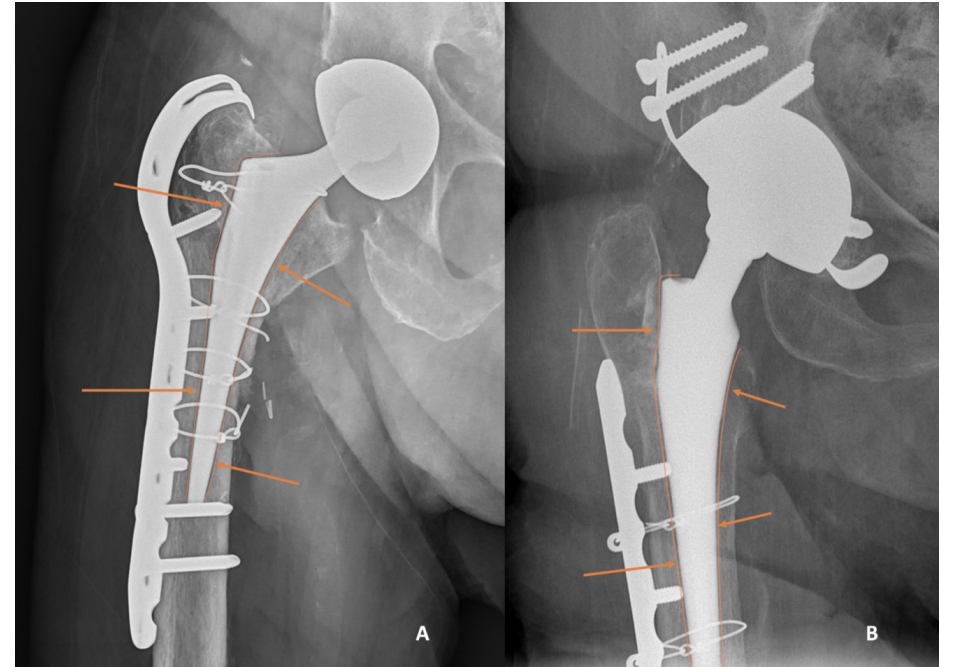


A



B

C



A

B



Periprosthetic hip fractures: an update into their management and clinical outcomes

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Peter V. Giannoudis^{1,2}

- The Vancouver classification is still a useful tool of communication and stratification of periprosthetic fractures, but besides the three parameters it considers, clinicians should also assess additional factors.
- Combined advanced trauma and arthroplasty skills must be available in departments managing these complex injuries.
- Preoperative confirmation of the THA (total hip arthroplasty) stability is sometimes challenging. The most reliable method remains intraoperative assessment during surgical exploration of the hip joint.
- Certain B1 fractures will benefit from revision surgery, whilst some B2 fractures can be effectively managed with osteosynthesis, especially in frail patients.
- Less invasive osteosynthesis, balanced plate–bone constructs, composite implant solutions, together with an appropriate reduction of the limb axis, rotation and length are critical for a successful fixation and uneventful fracture healing.

Keywords: femur; hip; hip arthroplasty; hip replacement; interprosthetic fractures; periprosthetic fractures; Vancouver classification

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Introduction

Arthroplasties of major joints represent some of the

arthroplasties performed, a rise in the incidence of fractures around the prosthesis (periprosthetic) is noticed globally. More people will outlive their implants and develop osteolysis, undergo revision surgery, or sustain a traumatic (high- or low-energy) event which may result in a periprosthetic fracture (PPF). The economic impact on healthcare systems when treating these injuries is quite significant.^{1,2}

Femoral fractures around a hip arthroplasty (THA) represent the most common periprosthetic fractures. Their contemporary management is mostly surgical and is considered technically challenging. Effective management of these injuries requires both trauma and arthroplasty skills, multidisciplinary input, and has substantial direct medical cost implications.

The Vancouver classification system/algorithm³ is the one most widely utilized to describe these fractures and also guide treatment. The Coventry classification has also been proposed, which divides patients into those with previously 'happy' vs. 'unhappy hips', based on the presence of radiographic or clinical evidence (prior to the fracture event) of a failing prosthesis.⁴ More recently, the UCS (Unified Classification System) has been introduced, allowing the inclusion of all possible scenarios of a fracture around an arthroplasty of all major joints.^{5,6}

We report on the current management, latest advancements, and clinical outcomes of periprosthetic femoral fractures around a hip arthroplasty and propose an algorithm that can successfully guide treatment.

Tips & Tricks



- Toujours faire un scanner (A > B1 ou B1/B2) + radios fémur entier



- Stabilité per-opératoire (B1/B2) > prothèse de révision en réserve.
(*planifier un changement même si ROOS seule*)

“A discrepancy of 20% between the preoperative impression and the intraoperative findings has been reported.”

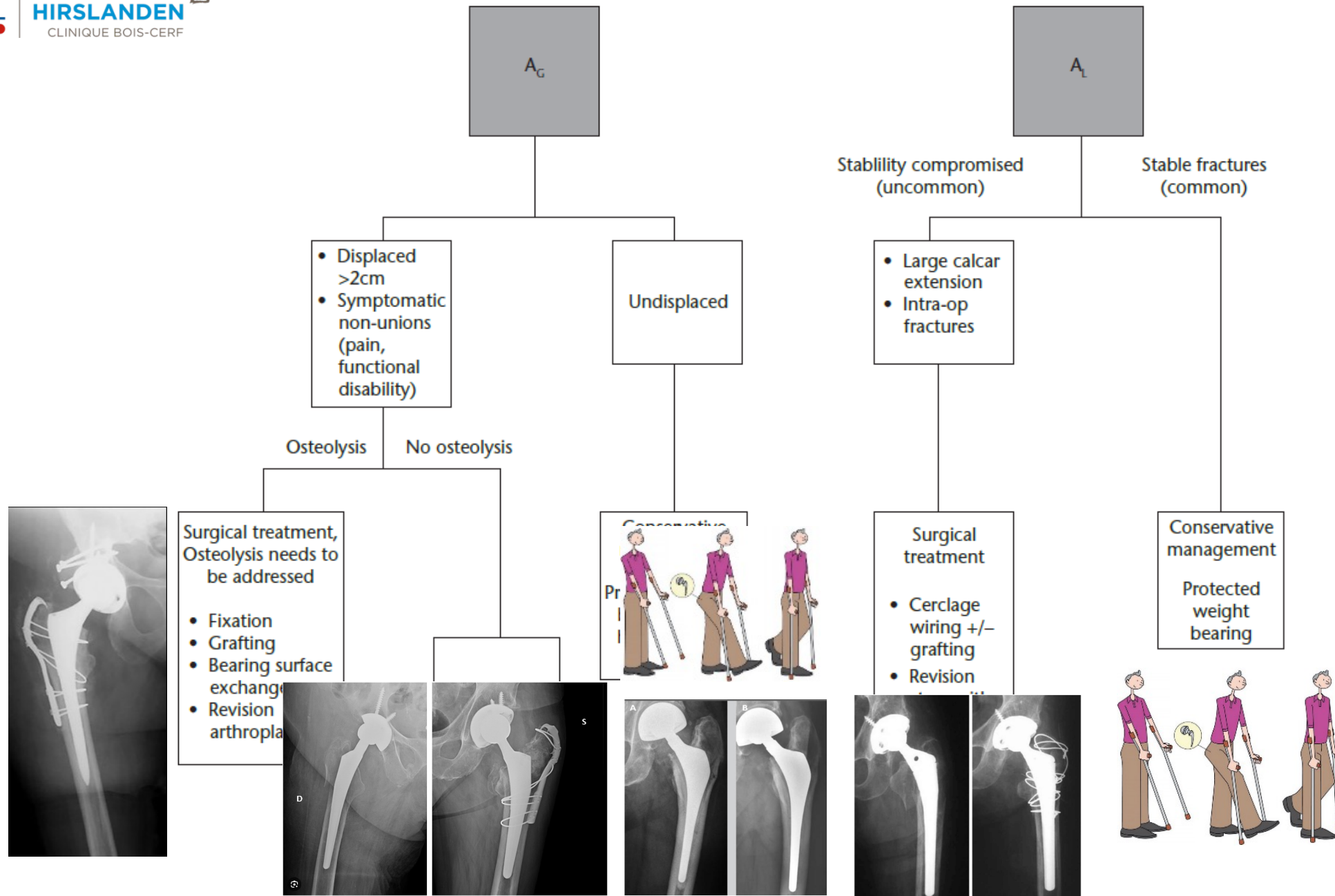


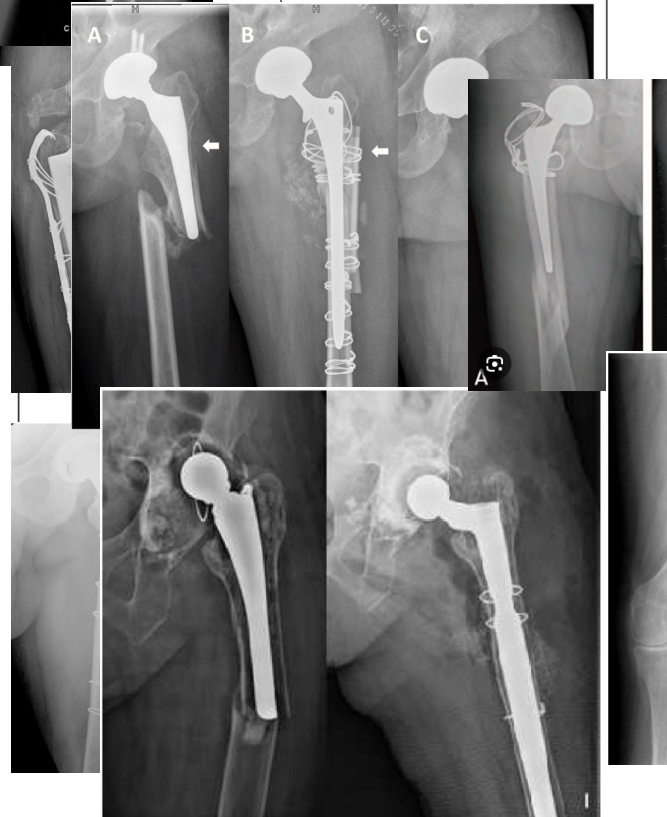
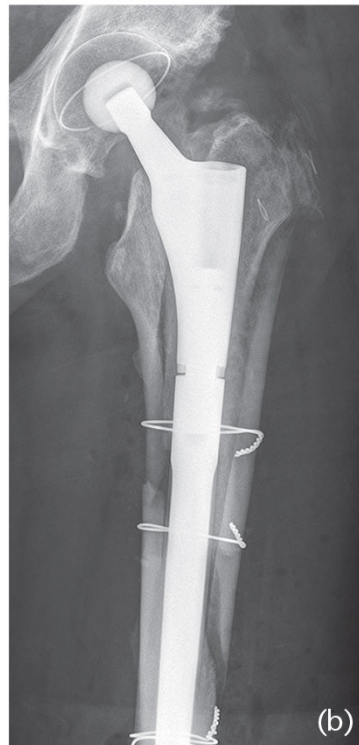
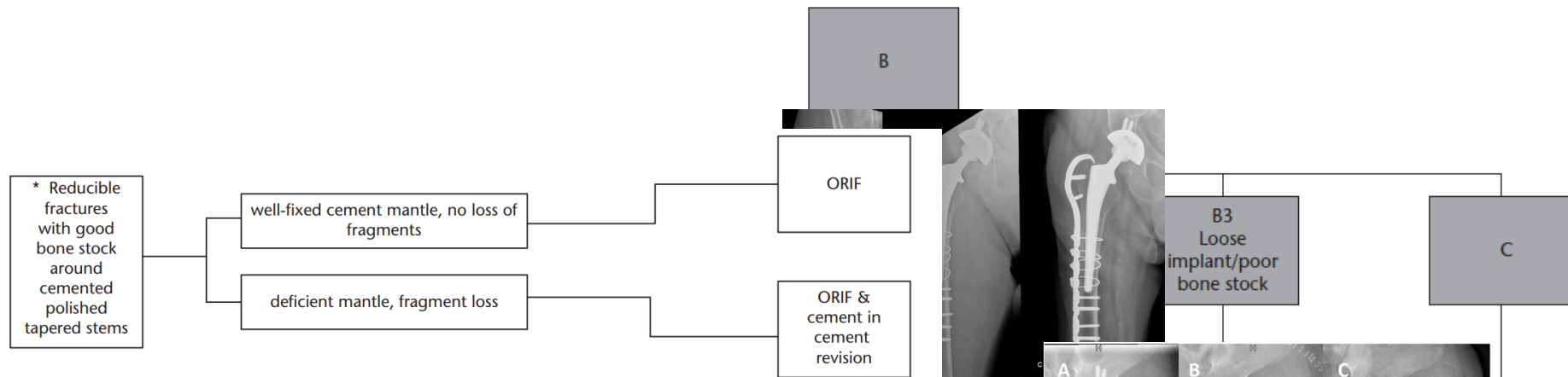
- Penser à l'infection si atraumatique, faire un assesment
(*anamnèse, clinique, imageries, laboratoire, ponction, etc...*)



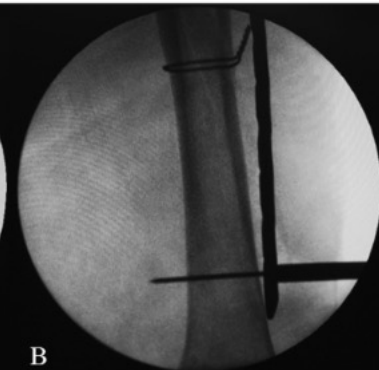
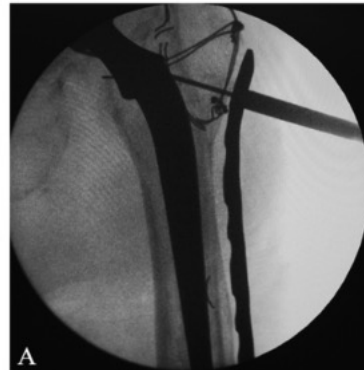
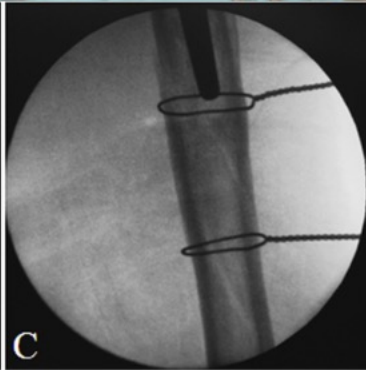
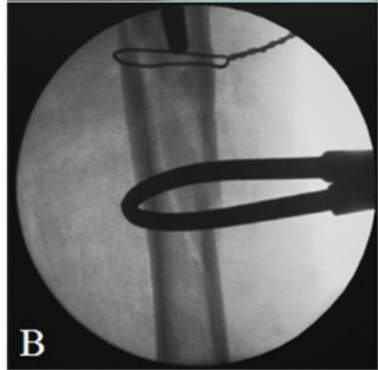
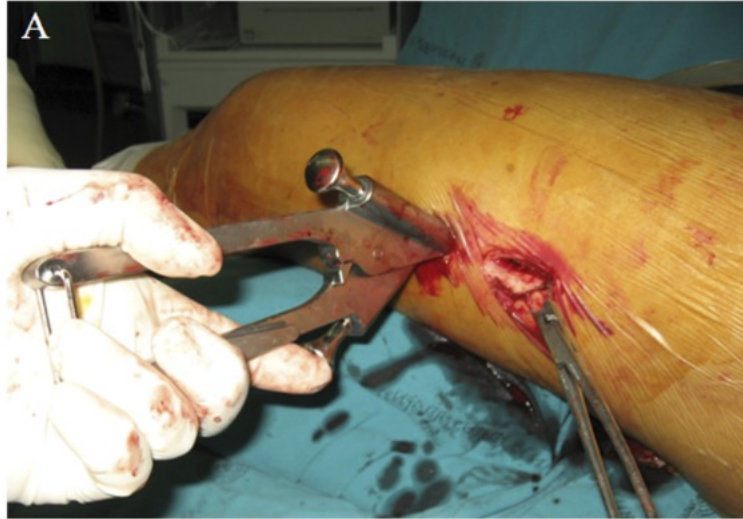
- Être à l'aise avec les principes de traumatologies ET d'orthopédie

«Envisager le pire»

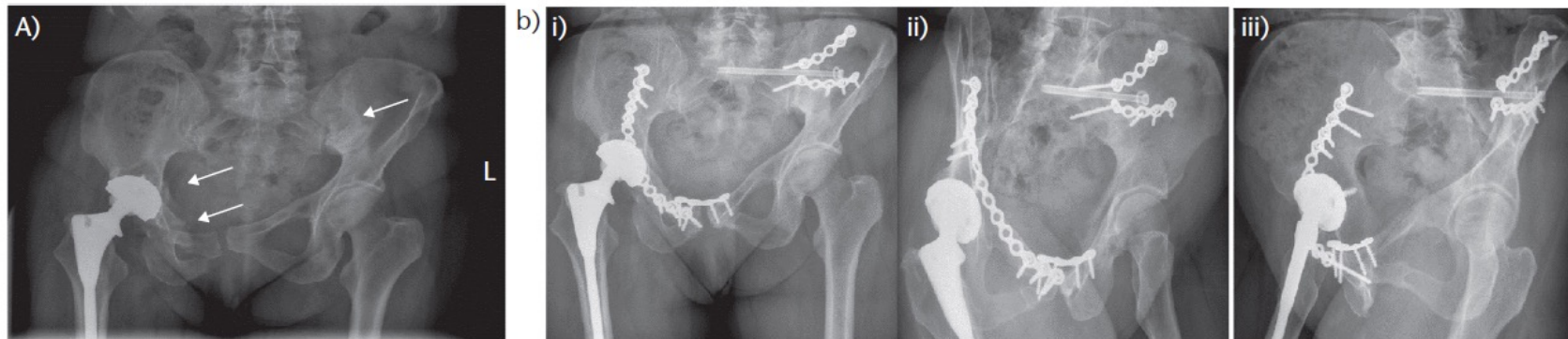
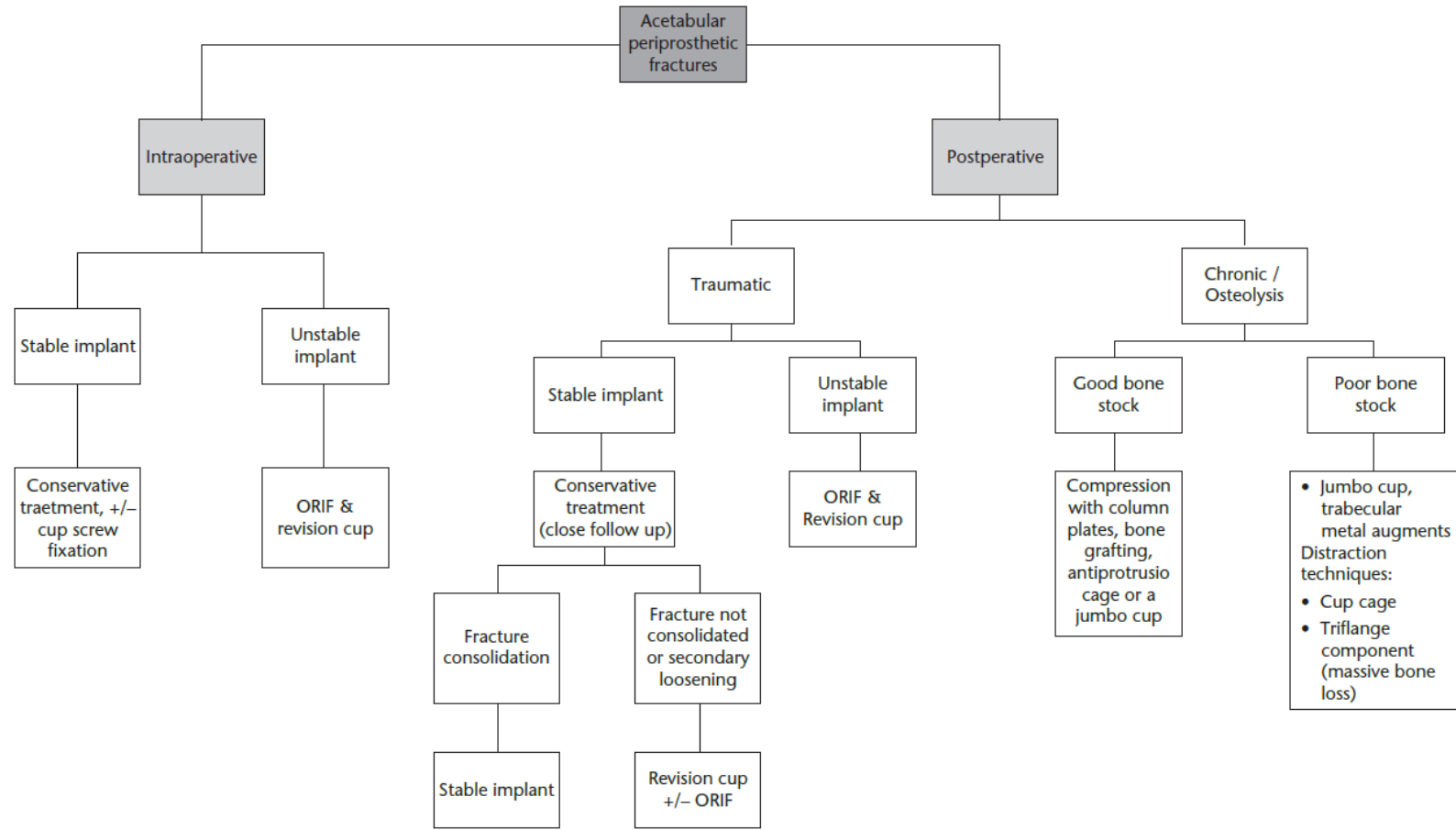




MIPO



Merci de votre attention



Pires Classification

