

# Emergency Department Guide for Acute Management of Pelvic & Acetabular Fractures

## ATLS Protocol with Complete Evaluation

### Assessment of Hemodynamics

#### Unstable

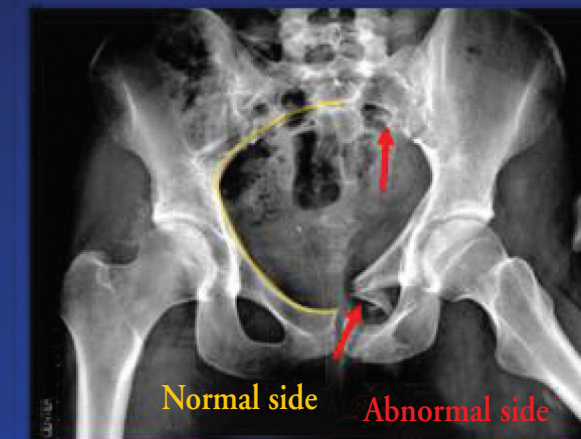
Aggressive resuscitation  
See acute interventions below  
Consider angiography

#### Stable

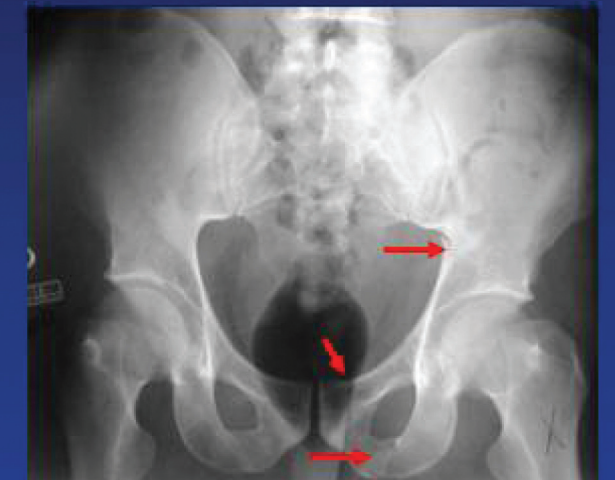
Close BP monitoring  
Orthopaedic consultation

## AP Pelvis X-Ray

Follow pelvic brim  
Critically assess posterior pelvis  
Identify abnormalities  
Consider Inlet/Outlet views and CT scan when injury found to clarify



Assess involvement of joint  
Pattern consistent with force through femoral head  
Look for articular injury  
Consider Judet (45° Oblique) views and CT scan for detail



## Pelvic Injuries

Pelvis acts as link between spine and lower extremities

### 1) Attempt to Classify Fracture or Injury Pattern

#### Lateral Compression

Pubic rami fractures  
Sacral impaction

#### AP Compression (Open Book)

Symphysis diastasis or anterior vertical fracture and SI disruption



#### Vertical Shear

Vertically and rotationally unstable



### 2) Attempt to Quantify Fracture or Injury Displacement



Posterior iliac wing fracture or contralateral open book injury suggests increasing instability



Increasing rotational instability



Increasing vertical instability



## Acetabular Injuries

Acetabulum provides weight bearing joint surface for femoral head

### 1) Attempt to Classify Fracture or Injury Pattern

Describe fracture anatomy usually relative to dome or posterior wall



### 2) Attempt to Quantify Fracture or Injury Displacement

Increased displacement or evidence of dislocation or instability lends towards more urgent treatment



## Acute Interventions to Consider

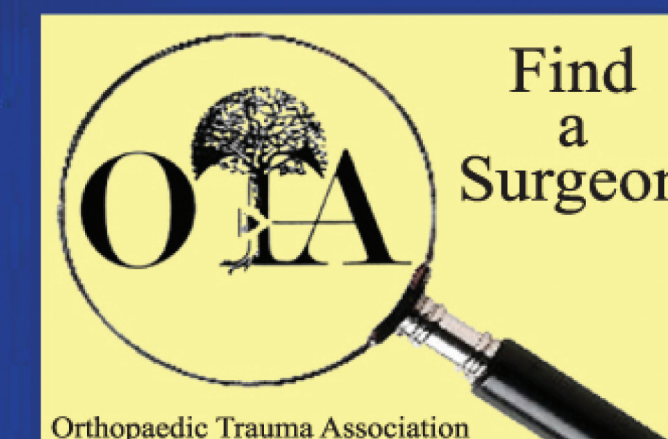
➤ Observation  
➤ Possible External Fixation

➤ Pelvic binder or sheet  
➤ External Fixation  
➤ Symphysis plate at laparotomy

➤ Pelvic binder or sheet  
➤ External Fixation  
➤ Skeletal traction!

➤ Reduction of Hip Dislocation  
➤ Skeletal Traction

The Orthopaedic Trauma Association presents this information as an educational service to the medical community. While the information is about health care issues and orthopaedic surgery, it is not medical advice. Individuals seeking specific orthopaedic advice or assistance for conditions such as these should contact an orthopaedic trauma surgeon through the Find a Surgeon program at [www.ota.org](http://www.ota.org).



## Orthopaedic Trauma Consultation

Call early and involve the Orthopaedic Surgeon in your decision making