MINIMALLY INVASIVE ILIAC SCREW FIXATION FOR POSTERIOR PELVIC RING RECONSTRUCTION IN TILE TYPE- C PELVIC FRACTURE

Dr. Sanjoy Biswas
Dr. Abrar Ahmed

Apollo Gleneagles Hospital, Kolkata, INDIA
• 42 year female presented to emergency following RTA with haemodynamic shock
• Pain over back
• SLR right side painful
• Distal pulses palpable
• No neuro deficit noted at time of admission.
• Resuscitation done according to ATLS protocol
• Primary survey
• Imaging—skeletal survey
• Secondary survey done
Pre-operative x-ray and CT scan
Options....

- Trans-iliac screws with rod
- Ilio-Sacral screws
We did--

- Minimally invasive iliac screw placement connected with connecting rod and manual compression over fracture with compression device.
Angulate arm to obtain tear drop of ilium

Entry point checked in AP view
7.5 mm diameter screw applied on both sides of ilium

Rod and lateral connector assembly

Iliac screw
Post operative x ray
DISCUSSION:

• Ilio-sacral screw is effective procedure in such cases but it was technically challenging due to
  • Upper sacral dysmorphism
  • Abnormal osseus anatomy
  • 44% malunion rate

• Advantages of trans-iliac fixation
  • The posterior column of ilium (PCI) was the main weight-bearing bones, and could allow diameter of 7.5 mm iliac screw implantation
  • Provide sufficient strength due to long nail tunnel and large nail diameter
  • Reduce chances of iatrogenic nerve injury
Conclusion:

• Minimally invasive tran iliac fixation is an effective procedure with less surgical time, less soft tissue injury, less chances of iatrogenic neurovascular injury.

THANK YOU