

Open Pelvic Injury: A Double Trouble?

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INTRODUCTION:

Open pelvic injuries are rare type of compound fracture which comprises of 2-4% of all pelvic fracture.¹ It defined by a pelvic bone fracture which has direct communication with external environment through adjacent soft tissue (perineum, vagina, rectum).² Consequently, open pelvic fractures have a significantly high morbidity and mortality rate.

REPORT:

We report a case of 19 years old female motorbike rider was brought to us after a road traffic accident with a pedestrian. She sustained few small open wounds over perineal area and multiple facial injuries. Radiographs showed bilateral superior-inferior pubic rami with pubic diasthesis and widening of left sacroiliac joint and left sacral ala fracture (Figure 1). She was treated as compound open book fracture – APC II. Preemptive antibiotics were given and she underwent wound debridement and supra-acetabular external-fixator on the same day (Figure 2).

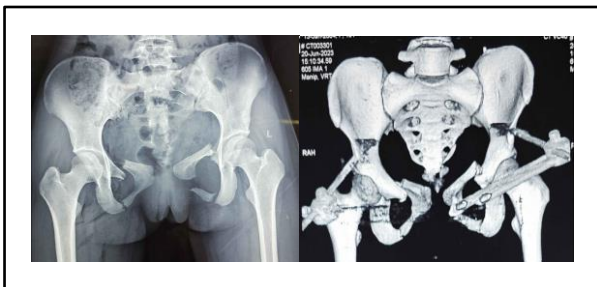


Figure 1: Pelvic AP Xray (Left) and CT 3D-Recon of Pelvis (Right)

One week afterwards, she underwent open reduction and reconstruction plating across pubic symphysis using modified Stoppa approach (Figure 2). After 4 months post trauma, CT scan was done which shows union fracture of bilateral superior and inferior pubic rami, and left sacral ala. She was gradually allowed to full weight-

bearing ambulation at 5 month post trauma. Good range of motion of bilateral hip achieved and patient has no complaint of pain.

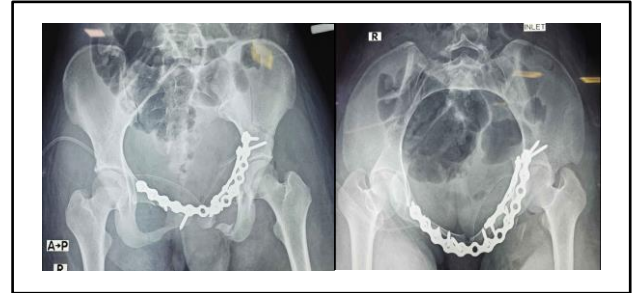


Figure 2: Pelvic X-Ray post ORIF (AP and Inlet View)

CONCLUSION:

Open pelvic fractures have greater rates of morbidity than those with closed pelvic fractures. Early surgical debridement and fracture stabilization is critical to achieve favorable and positive outcome in the long run.

REFERENCES:

1. Giordano V, Koch HA, Gasparini S, Labronici PJ, Amaral NP. Open pelvic fractures: review of 30 cases. *Open Orthop J.* (2016) 10:772–8.
2. Hermans et al. Open Pelvic Fracture: The Killing Fracture? *Journal of Orthopaedic Surgery and Research* (2018) 13:83