

Pelvic Ring Fractures Fixation in Childbearing Age Women

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INTRODUCTION:

Pelvic ring fractures account 5-7% of all fractures, in which 23% occur in childbearing age women². Among these women, pelvic trauma may have profound complications especially concerning method of child birth¹. Normal vaginal delivery is possible in women with pelvic fracture treated with pubic symphysis-sparing surgeries¹.

REPORT:

Ms. NS, 30-years-old female, alleged motor vehicle accident, was hit by a lorry on left side. She sustained pain over abdomen and left pelvis post trauma. On examination, pelvic spring positive hence, pelvic binder was applied and she was stabilized according to ATLS protocols. Neurovascular examination was unremarkable.

Her CT pelvis (Figure 1) showed comminuted fracture of left iliac wing involving sacroiliac joint (SIJ) with bilateral superior and inferior pubic rami fracture (Tile Type C3). Surgical intervention was opted, where initially supra-acetabular external fixation was done. She then underwent right SIJ screw fixation, left SIJ and left iliac wing plating with 3.5mm reconstruction plate and supra-acetabular external fixation was kept, sparing the pubic symphysis, maintaining pelvic symmetry and mobility.

Post operatively pelvic radiograph (Figure 2) showed good reduction. Supra-acetabular external fixation was kept for 2 months to stabilize anterior pelvic ring.



Figure 1: CT pelvis- vertical shear pelvic ring fracture with left iliac wing fracture



Figure 2: Post fixation with right SIJ percutaneous screw fixation, left SIJ and iliac wing plating, supra-acetabular external fixation

CONCLUSION:

In childbearing age women, pelvic ring fractures surgical treatment choices are critical to avoid disrupting the pelvic symmetry and mobility for uncomplicated normal vaginal delivery^{1,2}. Hence, external fixation was used for definitive fixation of the anterior ring in this case.

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