

U-shaped Spinopelvic Dissociation Treated Without Open Sacral Decompression

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PURPOSE:

Spinopelvic dissociation is a rare injury with information mostly derived from small case series, case reports or retrospective studies. Here we present a case of a 27 year old gentleman who presented to us with a U-shaped spinopelvic dissociation following a motor vehicle accident which was surgically stabilized without open sacral decompression^{1,2}.

MATERIALS AND METHODS:

Our patient underwent surgery 14 days after the initial trauma due to severe intra-abdominal injury. A high anterior external fixator was applied during trauma as a resuscitative method. For our patient, we had chosen a minimal invasive technique for the iliosacral screws, anterior column screws and the posterior iliac screws combined with a lumbopelvic fixation. We avoided the need to perform a formal open reduction at the sacrum region so as to avoid future wound complications as the patient had a revision laparotomy due to infection after the first laparotomy².

RESULTS AND DISCUSSIONS:

Controversies are still present when debating on the need of a formal open sacral decompression versus indirect decompression. By achieving an acceptable reduction of the translation and kyphotic deformity of the fracture, Schildhauer et al and William et al observed that neurological recovery is possible with indirect decompression^{1,2}.

In view of previous laparotomy wound infection and the need to rehabilitate patient as soon as

possible, we performed indirect reduction and decompression of the spinopelvic dissociation².



Figure 1: Pre op x-ray Figure 2: Post op x-ray

CONCLUSION:

Spinopelvic dissociation continues to be a challenging problem for orthopaedic surgeons. As it is rare, this injury is commonly missed in the acute setting which may lead to poor outcome. With the development of modern implants, surgical stabilization is the current trend. Open sacral decompression is not always necessary and multiple factors need to be taken into account before deciding for open decompression as it may lead to wound dehiscence of the surgical site².

REFERENCES:

1. Schildhauer TA, Bellabarba C, Nork SE,. Decompression and lumbopelvic fixation for sacral fracture-dislocations with spino-pelvic dissociation. J Orthop Trauma. 2006;20:447–57
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