CHAPTER IX

SUMMARY & CONCLUSION

SUMMARY AND CONCLUSION

In this essay, I discussed the anatomy, biomechanics, classifications, diagnostic methods, associated injuries, different methods of treatment, complications, and prognosis of cases with unstable pelvic fractures.

Anatomically and biomechanically, the pelvis is formed of two arches; the posterior arch, that is concerned with pelvic stability and Iight bearing and its main component is the sacroiliac complex, and an anterior arch which acts only as a strut preventing collapse of the ring. Any unstable pelvic fracture should affect the posterior Iight bearing part of the ring.

I discussed the different classification systems and accepted the Young's classification as the most recent and successful one as it enables the clinicians to determine the fracture personality, associated injuries, and the best line of treatment.

Clinical examination, plain radiographic projections, CT scanning, and sometimes MRI are important for diagnosis of type of fracture, pelvic stability, associated soft tissue and

ligamentous injuries, and for determination of the fracture personality and most suitable method of treatment.

Almost two thirds of cases with unstable pelvic fractures are associated with other fractures and soft tissue injuries. Urologic injuries are the most frequent associated soft tissue injuries and occur with fractures of the anterior pelvic ring.

Brain injury is the most serious associated injury and statistically its high incidence occurs with lateral compression injury type I and type II.

Different methods of treatment Ire discussed with advantages and disadvantages of each method.

I concluded that the non-conservative methods are the best for unstable pelvic fractures as they allow early ambulation, short hospital stay, and better local and systemic prognosis. External fixation is a very good line of treatment as I dealing with the anterior ring, but as regarding the posterior ring, I found that the external fixation did not provide enough compression, therefore open reduction with internal fixation of the posterior ring plus external skeletal fixation of the anterior ring is the best line of treatment of these cases.

The prognosis of cases depend upon the personality of fracture, associated injuries, and the skills of treating personnels. Malunion and nonunion are the most common local complications and should be prevented by perfect anatomical reduction and stable fixation. They are associated with pain especially on light bearing, limping, clinical instability and deformity.