

"Management of Fracture Acetabulum"

Essay submitted for partial fulfillment of the Master Degree in
Orthopedic Surgery

Presented by

Farid Samir Farid Mohamed

M.B., B.ch., 1993

Ain Shams University

617.398
F.S

Under the supervision of

PROF. DR. MOHAMED MAZIAD

Professor of Orthopedic Surgery

Faculty of Medicine, Ain Shams University

PROF.DR.AHMED EMAD

Assistant Professor of Orthopedic Surgery

Faculty of Medicine, Ain Shams University

PROF.DR.HANY HEFNY

Assistant Professor of Orthopedic Surgery

Faculty of Medicine, Ain Shams University

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Abstract

Fractures of the acetabulum represent one of the challenging types of fractures that can face an orthopedic surgeon.

The acetabulum is located in the concavity of an arch formed by the meeting of the bones constituting the hip bone (ischium, ilium and pubis). It is composed of a large anterior column (ilio-pubic) and a smaller posterior column (ilio-ischial), these columns are joined at their inferior ends by the pubic segment. The anterior column is less frequently fractured than the posterior column, due to the frequency of the posteriorly directed forces causing the fracture.

Acetabular fractures are so complex that no perfect classification exists, any classification may only serve two purposes:

- It allows surgeons to compare similar groups of patients treated by different methods.
- It may help the individual surgeon to take a logical management decision for his patient.

Acetabular fractures have traditionally been managed with non-operative treatment, but owing to the difficulty in classification, the relative surgical inaccessibility of the fracture, and the frequency of associated traumatic injuries, many surgeons used to avoid operative management of such fractures.

Unpredictable and frequently poor outcomes have been demonstrated to result from non-operative treatment of certain fracture types, especially the displaced ones at the weight-bearing dome and those associated with interarticular loose fragments.

Anterior column fractures are more liable to attain good results with non-operative means than posterior column fracture types. The major authors on this subject, whether they recommended closed or open methods of treatment, agree on a basic principle; *Congruity between the femoral head and the acetabulum is essential for consistently good results.*

Despite accurate reduction and rigid internal fixation of displaced acetabular fractures, the potential for significant complications and poor results is great.
