

**THE ROLE OF SPIRAL CT
IN THE MANAGEMENT OF PATIENTS
SUSPECTED OF HAVING ORBITAL
BLOWOUT FRACTURE**

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Summary

Patients with blunt orbital trauma and clinical signs suggestive of orbital floor fracture and/or medial wall involvement were the targets of our search. Among patients consulting the out patient clinic of maxillofacial surgery at AL-Shaheed Adnan Surgical Teaching Hospital, the surgical casualty, or referred from other departments or hospitals; 20 orbits of 20 patients were assessed from May/2001 to May/2002. Plane occipitomenal x-ray films were taken for all patients and assessed by surgeon and radiologist. Then spiral CT examination done including axial, coronal, sagittal sections, and three-dimensional reconstruction. A comparison between plane x-ray and spiral CT diagnosis was carried out. We compared information obtained from two- dimensional (2D) CT sections with those from three-dimensional (3D) CT images regarding blowout fracture. We attended the surgical management for orbital fractures included in our series, documenting the condition of the floor and medial wall, comparing it with spiral CT findings. Patients with blowout fractures that were treated conservatively were given

appointments for follow-up. We found that: **(1)** Spiral CT examination does provide findings that were not identified from clinical and plane x-ray examination, **(2)** Spiral CT findings coincide with findings at operative exploration of orbital floor. **(3)** Two-dimensional (axial, coronal, and sagittal sections were more informative than three dimensional reconstruction images regarding blowout fracture. **(4)** Patients with comminuted floor without defect or soft tissue entrapment were frequently underestimated regarding risk of developing late complications.