

*In the name
of God*

148419

Shiraz university of medical sciences

school of dentistry

**Orbital wall fractures, an epidemiologic study
in Shiraz**

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the requirements for the degree of doctor of dentistry**

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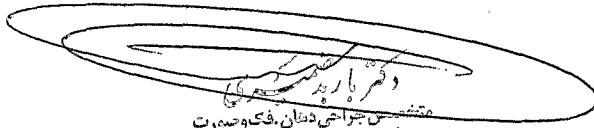
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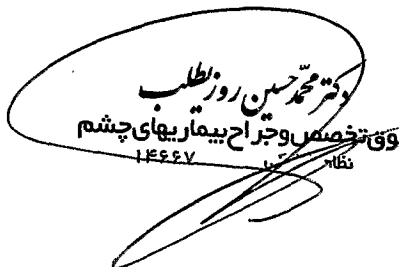
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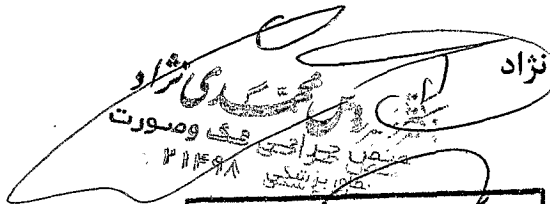
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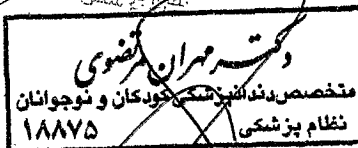

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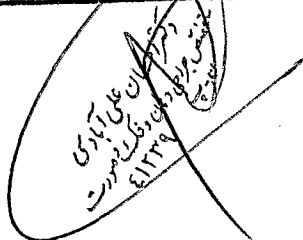
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Abstract

Background purpose:

Orbital floor blowout fracture (OFBF) is a common occurrence after head trauma especially in young male population. We have evaluated the epidemiology of this disease to alert the authorities to plan for prevention and better management.

Material and methods:

Charts of twenty six cases of OFBF from two governmental public hospital in Shiraz were studied retrospectively, considering age, gender, time period, location, type of trauma, type and duration of operation, complications and final result. Data were collected and studied.

Results:

Majority of the cases were very young male between 16-25 years of age (53.8 percent). Diplopia was the most frequent symptom (42.5 percent). Common causes were motor cycle accident (42.2 percent), trauma by fist (23.3 percent), car accident (19.4 percent) and fall from height (19.4 percent).

Conclusion:

No difference was found in the results pertaining to the type of material used to close the defect. Public information's regarding obligatory use of head protector among motor cycle, drivers, seat belt for car passengers will decrease the incidence of the disease.

Key words:

Diplopia, Enophthalmos, Orbital floor blowout fracture, Restriction of up gaze, Motility,

Abbreviation

BOF: blowout fracture

CSF : cerebrospinal fluid

FX : Fracture

HEM : Hemorrhage

LAT: Lateral

OFBF: Orbital floor blowout fracture

SUB CONJ: Subconjunctival

Chapter one

Introduction

INTRODUCTION:

1-1 Background:

Orbital floor fractures may result when a blunt object, which is of equal or has greater diameter than the orbital aperture, strikes the eye. The globe usually does not rupture, and the resultant force is transmitted throughout the orbit causing a fracture of the orbital floor or to the medial wall of the orbit. Signs and symptoms can be quite varied, ranging from asymptomatic with minimal bruising and swelling to diplopia, enophthalmos, hypo-ophthalmia (ie, hypoglobus), and hypoesthesia of the cheek and upper gum on the affected side. Treatment is titrated to the degree of injury (1).

1-2 Pathophysiology:

The orbit and its contents are affected by orbital floor fractures. Direct fractures of the orbital floor can extend from orbital rim fractures, while indirect fractures of the orbital floor may not involve the orbital rim. The cause of the fracture is thought to be from increased in hydrostatic pressure induced by direct trauma to the globe (2), which causes the orbital bones to break at their weakest point.