

THE ROLE OF COMPUTED TOMOGRAPHY AND ULTRASONOGRAPHY IN THE EVALUATION OF ORBITAL TRAUMA

Thesis

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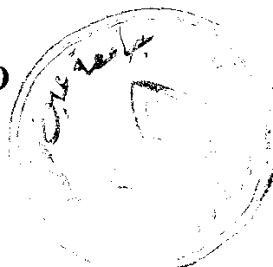
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CONTENTS

	Page
I - Introduction and Aim of work	1
II - Anatomy of the eye and orbit	2
III - Classification and clinical presentation of orbital trauma	25
IV - Subjects and Methods.....	38
V - Results.....	42
VI - Discussion.....	131
VII- Summary and Conclusion.....	147
VIII- References.....	150
IX- Arabic summary	

ABSTRACT

The Role of Computed Tomography and Ultrasonography in the Evaluation of Orbital Trauma

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Purpose : To examine the value of computed tomography and ultrasonography in the assessment of orbital trauma patients.

Subjects and Methods: Fifty patients with orbital trauma were examined with computed tomography and forty six of them were examined by ultrasonography.

Results: Forty six patients suffered ocular trauma, thirty seven suffered trauma to orbital soft tissues and twenty one suffered orbital fractures. US detected 8 cases with lens injuries while CT detected 7 of them . CT detected 3 cases with anterior segment IOFB , one of them was missed on US. 7 out of the 9 cases of vitreous hemorrhage detected by US were detected by CT. US detected 8 cases with retinal detachment, only 1 case was suspected by CT. The 9 cases of posterior segment IOFB were detected by both US and CT . CT detected all types of injuries to orbital soft tissues in 37 cases, while US could only detect 3 cases with intraorbital foreign bodies. CT detected all 21 cases with orbital fractures and none of them were detected by US .

Conclusion: Ultrasound is superior in detection of ocular trauma especially cases with vitreous hemorrhage and retinal detachment , while computed tomography is superior in the detection of orbital fractures, trauma to orbital soft tissues and identification and localization of intraocular or intraorbital foreign bodies.

LIST OF TABLES

Number	Page
Table (1)	Characteristics of all cases with orbital trauma 43
Table (2)	Representation of different age groups and sex of patients with orbital trauma..... 53
Table (3)	Clinical presentation of patients included in the study... 54
Table (4)	Uni - / Bilateral Orbital Trauma..... 55
Table (5)	Causes of orbital trauma..... 55
Table (6)	Number of cases included in each of the 3 groups..... 56
Table (7)	Number of cases with ocular trauma..... 57
Table (8)	Number of cases with lens injuries detected by CT & / or US..... 58
Table (9)	Number of cases with anterior segment IOFB detected by CT & / or US..... 59
Table (10)	Number of cases with vitreous hemorrhage detected by CT & / or US..... 60
Table (11)	Number of cases with retinal detachment detected by CT & / or US..... 61
Table (12)	Number of cases with posterior segment IOFB detected by CT & / or US..... 62
Table (13)	Number of cases with trauma to orbital soft tissues and detection by CT & / or US..... 63
Table (14)	Number of cases with orbital fractures..... 64

Number	Page
Figure (20) A-C Case no. 1. Axial & coronal CT scans & sonogram.....	65
Figure (21) A-F Case no.2. Axial & coronal CT scans & sonogram.....	67,68
Figure (22) A-D Case no.3. Scout view, CT scans &sonogram.....	69
Figure (23) A-C Case no.5. Axial & coronal CT scans &sonogram.....	71
Figure (24) A-D Case no.8. Axial & coronal CT scans & sonogram.....	73
Figure (25) A-D Case no.9. Axial CT scans & sonograms.....	75
Figure (26) A,B Case no.12. Axial CT scan and sonogram.....	77
Figure (27) Case no.13. Sonogram.....	79
Figure (28) Case no.15. Sonogram.....	81
Figure (29) A-D Case no.16. Axial CT scans & sonograms.....	83
Figure (30) A,B Case no.19. Axial & coronal CT scans.....	85
Figure (31) A,B Case no.21. Axial & coronal CT scans.....	87
Figure (32) A-C Case no.22. Axial & coronal CT scans & sonogram....	89
Figure (33) A-C Case no.23. Axial CT scans & sonogram.....	91
Figure (34) A-D Case no.24. Axial & coronal CT scans.....	93
Figure (35) A-E Case no.25. Axial&coronal CT scans &sonogram....	95,96
Figure (36) A-E Case no.26. Scout view, axial CT &sonograms.....	97,98
Figure (37) A-D Case no27. Axial&coronal CT scans &sonogram..	99,100
Figure (38) A-D Case no.28. Scout view, axial CT & sonogram.....	101
Figure (39) A,B Case no.31. Axial CT scans.....	103
Figure (40) A-G Case no.32. CT scans & sonogram.....	105,106
Figure (41) A-G Case no.33. CT scans & sonogram.....	107,108
Figure (42) A-C Case no.35. Axial & coronal CT scans.....	109

Number	Page
Figure (43) A-D Case no.36. CT scans & sonogram.....	111,112
Figure (44) A-C Case no.37. Coronal CT scans.....	113
Figure (45) A-D Case no.38. Coronal CT scans & sonogram.....	115,116
Figure (46) A-C Case no.39. Axial & coronal CT scans.....	117
Figure (47) A-F Case no.40. Axial&coronal CT scans & sonogram...	119
Figure (48) A-D Case no.41. Axial & coronal CT scans & 3D.....	121
Figure (49) A-C Case no.43. Axial & coronal CT scans & 3D.....	123
Figure (50) A-C Case no.48. Axial CT scans.....	125
Figure (51) A-C Case no.49. Axial & coronal CT scans.....	127
Figure (52) A,B Case no.50. Axial & coronal CT scans.....	129

