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Diagnostic Imaging in Pediatric Trauma

With Contributions by

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With 275 Figures in 468 Separate Illustrations

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Preface

Trauma to various organ systems is a common medical problem in the pediatric age group. With the increase in vehicular traffic and active participation in contact sports, as well as a change in the social atmosphere, the incidence of injury to children is increasing. There is considerable morbidity associated with these injuries and accidents are the most common cause of death in this population group.

The radiologist, using the various diagnostic radiological modalities available, becomes involved in practically all cases of trauma of any degree of seriousness. The radiological methods lend themselves not only to determining the specific diagnosis but also to assessing the extent of the injury. This is important in determining the management of the patient as in recent years a more conservative type of therapy is advocated in several types of injury.

As has been said, "Children are not like adults," hence injuries are of different types from those seen in adults. The ligaments and tendons of children are stronger than the bone structure, thus sprains and strains are not as common as fractures. Certain organs are in a less protected position in a child and may readily be injured from relatively minor trauma. Injury due to violent action of others such as gunshot and stab wounds are not as common as in the adult population but they are increasing in the teenage group. Blunt trauma or that due to rapid deceleration is the usual type of trauma seen in childhood.

Many textbooks, as well as articles published in various journals, deal with trauma in general, but only a few specifically pertain to children, and the majority of these are mainly related to management of the injury. In this volume, the emphasis is on the radiological approach and diagnosis of childhood injury. Special attention is given to the way in which pediatric trauma differs from that in the adult.

The material included in this volume is, for the most part, taken from cases seen at the Childrens Hospital of Los Angeles. The authors are on the radiological staff at Childrens Hospital and they have drawn heavily on their own personal experiences in handling pediatric patients who have been injured.

The chapters are broken down into the various organ systems for easy reference, and pertinent articles from the literature are included in each chapter bibliography. A section on ultrasound and nuclear medicine is included which covers the use of these modalities, when indicated, in all trauma.

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John L. Gwinn
Philip Stanley

Contents

1	Introduction (J. L. Gwinn and P. Stanley)	1
2	Urinary Tract Trauma (J. L. Gwinn and P. Stanley)	2
2.1	Renal Trauma	2
2.1.1	Classification of Injury	4
2.1.1.1	Contusion of the Kidney	4
2.1.1.2	Parenchymal Injury Without Pyelocalyceal Involvement	5
2.1.1.3	Parenchymal Injury with Pyelocalyceal Involvement	6
2.1.1.4	Renal Pedicle Injury	7
2.1.2	Iatrogenic Trauma	11
2.1.3	Management and Complications	11
2.2	Ureteral Trauma	11
2.3	Bladder Trauma	12
2.4	Urethral Trauma	14
	References	14
3	Neuroradiology in Head Trauma	
	(H. D. Segall, J. G. McComb, F. Y. Tsai, and J. H. Miller)	18
3.1	Introduction	18
3.1.1	General Comments	18
3.1.2	Skull X-rays	19
3.1.3	Angiography	19
3.1.4	Computerized Tomography	20
3.1.5	Echoencephalography	21
3.1.6	Air Studies	21
3.1.7	Radionuclide Brain Scanning	21
3.2	Trauma Involving the Pediatric Skull	22
3.2.1	Skull Fractures – General Comments	22
3.2.2	Fractures Involving the Skull Base, Paranasal Sinuses, and Petromastoid Structures	24
3.2.3	Depressed Skull Fractures	27
3.2.3.1	General Comments	27
3.2.3.2	In Infancy	27
3.2.4	Trauma to the Infant's Skull	28
3.2.4.1	Molding	28
3.2.4.2	Cephalohematoma	29
3.2.5	Enlarging Skull Fractures	31
3.2.6	Roentgenographic Changes in Head Bangers	33
3.2.7	Intracranial Foreign Bodies	33
3.3	Intracranial Hemorrhage and Cerebral Trauma	34
3.3.1	Fundamental Considerations	34

3.3.2	Intracerebral Hematoma	38
3.3.3	Intraventricular Hemorrhage	39
3.3.4	Subarachnoid Hemorrhage	41
3.3.5	Subdural Hematoma	41
3.3.5.1	Timing and Density of Subdural Hematoma	42
3.3.5.2	Acute Subdural Hematoma	43
3.3.5.3	Isodense Subdural Hematoma	46
3.3.5.4	Chronic Subdural Hematoma	47
3.3.5.5	Skull Film in Subdural Hematoma	49
3.3.6	Extradural Hematoma	50
3.3.7	Cerebral Contusion	53
3.3.8	Cerebral Edema	54
3.3.9	Acute General Cerebral Swelling	54
3.4	Traumatic Vascular Lesions	57
3.4.1	Traumatic Aneurysms	57
3.4.2	Arteriovenous Fistulas	58
3.4.3	Dissecting Aneurysm	58
3.4.4	Posttraumatic Spasm	58
3.4.5	Increased Intracranial Pressure	58
3.4.6	Posttraumatic Arterial Stenosis and Occlusion	59
3.4.7	Strangling	60
3.4.8	Cerebral Infarction	60
3.4.9	Venous Sinus Occlusion	60
3.4.10	Subepicranial Varix	60
3.5	Conclusion: Neuroradiology in Head Trauma in Perspective	60
	References	61
4	Injuries to the Spine (P. Stanley)	64
4.1	Cervical Spine	64
4.1.1	Occipital-atlantoaxial Region	64
4.1.1.1	Pseudosubluxation of Axis	66
4.1.1.2	Atlanto-occipital Dislocation	66
4.1.1.3	Atlanto-occipital Instability	66
4.1.1.4	Jefferson Fracture (Vertical Compression Injury of C1)	66
4.1.1.5	Extension Fracture of Atlas	67
4.1.1.6	Isolated Atlanto-axial Dislocation	67
4.1.1.7	Fractures of the Odontoid	67
4.1.1.8	Hangman's Fracture	68
4.1.2	Injuries Below the Axis	69
4.1.2.1	Flexion Injuries	70
4.1.2.2	Hyperextension Injuries	72
4.1.2.3	Pathological Fractures	74
4.2	Thoracolumbar Spine	74
4.2.1	Flexion Injuries	75
4.2.2	Seat-belt Hyperflexion Injury	76
4.2.3	Compression	77
4.2.4	Rotation	78
4.2.5	Extension	78
4.2.6	Shearing	80
4.2.7	Transverse Process Fractures	80
4.2.8	Posttraumatic Deformity	80
4.3	Lumbosacral Spine	80

4.3.1	Fatigue or Stress Changes	80
4.3.2	Fractures of the Sacrum and Coccyx	81
4.3.3	Coccyx Injuries	82
4.3.4	Radiation Injury to the Lumbar Spine	83
	References	83

5 Facial and Temporal Bone Trauma

(J. H. Miller and C. J. Schatz) 86

5.1	Facial Trauma	86
5.1.1	Roentgenographic Evaluation	86
5.1.2	Patterns of Facial Injury	87
5.1.2.1	Soft Tissues	87
5.1.2.2	Nasal Bones	87
5.1.2.3	Teeth	89
5.1.2.4	Mid Face	89
5.1.2.5	Orbital	89
5.1.2.6	Cribriiform Plate	93
5.1.2.7	Temporomandibular Joint	93
5.1.2.8	Mandible	96
5.1.2.9	Complications	97
5.2	Temporal Bone Trauma	97
5.2.1	Neurosensory Hearing Loss	99
5.2.2	Conductive Hearing Loss	100
5.2.3	Facial Nerve Injury	100
5.2.4	Sequelae of Temporal Bone Trauma	103
	References	103

6 Nuclear Medicine and Ultrasound in Pediatric Trauma

(G. F. Gates) 105

6.1	Brain	105
6.2	Lungs	111
6.3	Abdomen	113
6.3.1	Liver	113
6.3.2	Spleen	116
6.3.3	Pancreas	117
6.4	Renal	117
6.5	Bone	122
6.6	Conclusion	129
	References	129

7 Pancreatic and Adrenal Trauma (P. Stanley and J. L. Gwinn) 132

7.1	Pancreatic Trauma	132
7.2	Adrenal Trauma	134
	References	136

8	Injuries to the Liver and Spleen (P. Stanley and J. L. Gwinn)	138
8.1	Hepatic Trauma	138
8.1.1	Plain Films	138
8.1.2	Intravenous Urogram	138
8.1.3	Isotopes and Ultrasound	139
8.1.4	Arteriography	139
8.1.5	Cholangiography	141
8.1.6	Computerized Tomography	143
8.1.7	Radiation-induced Injury	143
8.2	Injuries to the Spleen	143
	References	145
9	Gastrointestinal Trauma (J. L. Gwinn and P. Stanley)	148
9.1	Stomach	148
9.1.1	Clinical	148
9.1.2	Roentgenographic	148
9.2	Duodenum	149
9.2.1	Clinical	150
9.2.2	Roentgenographic	152
9.3	Small Intestine	154
9.3.1	Clinical	154
9.3.2	Roentgenographic	154
9.4	Colon	156
9.4.1	Clinical	157
9.4.2	Roentgenographic	157
9.5	Summary	157
	References	157
10	Chest Trauma (P. Stanley and J. L. Gwinn)	159
10.1	Soft Tissues	159
10.2	Fractures of the Rib Cage and Sternum	159
10.3	Pneumothorax	160
10.4	Hemothorax	161
10.5	Chylothorax	162
10.6	Tracheobronchial Injury	162
10.7	Lung Contusion, Hematoma Formation, and Lung Cysts	163
10.8	Postshock Lung	163
10.9	Foreign Body Aspiration	164
10.10	Toxic Inhalation Pneumonitis	164
10.11	Near Drowning	166
10.12	Cardiac Contusion	166
10.13	Aortic Laceration/Rupture	167
10.14	Esophagus	167
10.15	Diaphragmatic Injury	169
10.16	Trauma Related to Artificial Support Systems and Resusci- tation	170
10.16.1	Endotracheal Intubation	170
10.16.2	Vascular Catheters	171

10.16.3	Esophageal Pseudodiverticula in the Newborn	171
10.16.4	Respirator-related Problems	172
10.17	Trauma Related to Therapy	173
10.17.1	Radiation- and Chemotherapy-induced Pneumonitis	173
10.17.2	Tracheostomy Complications	173
	References	173
11	Skeletal Trauma (F. A. Lee)	176
11.1	Diagnosis	176
11.2	Types of Fracture	180
	Epiphyseal Fractures	183
11.3	Types of Trauma	188
11.3.1	Intrauterine Trauma	188
11.3.2	Birth Trauma	188
11.3.3	Pathologic Fractures	189
11.3.4	Stress Fractures	191
11.3.5	Athletic Injuries	192
11.3.6	Battered Child Syndrome	192
11.4	Conclusion	195
	References	195
	Subject Index	197

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