

Contents

Foreword	ix
<i>Aaron Cohen-Gadol</i>	
Foreword	x
<i>A.K. Mahapatra</i>	
Preface	xi
Acknowledgment	xii
Contributors	xiii
Section I: Pre-Surgical Head Injury Management	
1. Preoperative Evaluation and Management of Head Injury Patient	1
<i>Akshay V. Kulkarni, Girish Menon</i>	
2. Imaging Essence	19
<i>Anoop Kumar Singh, Gayatri Kumari, Chandan Yadav, Ambuj Kumar</i>	
3. Head Injury: An Anesthetic Consideration	41
<i>Gayatri Kumari</i>	
Section II: The Techniques with Surgical Nuances	
Subsection I: ICP Monitoring	
4. Techniques of ICP Monitoring in Traumatic Brain Injury	52
<i>Vivek Tandon, Ravi Sharma, and Varidh Katiyar</i>	
Subsection II: The Principle Management of Layers	
5. Scalp and Muscles	61
<i>Awdhesh Yadav, Anoop Kumar Singh, and Aneeta Singh</i>	
6. Cranium	80
<i>Anoop Kumar Singh, Awdhesh Yadav, Akash Rambhau Dangat, and Bipin Chaurasia</i>	
7. Pachymeninx: The Dura	98
<i>Anoop Kumar Singh</i>	
8. Duraplasty	108
<i>Anoop Kumar Singh</i>	
9. Leptomeninx: The Arachnoid and the Pia Mater	123
<i>Anoop Kumar Singh</i>	
Subsection III: Scalp and Facial Injuries	
10. Scalp Injuries	125
<i>Ankur Bhatnagar, Anupama Singh, Sarsij Sharma, Harsha Vardhan, AK Srivastava</i>	
11. The Neurosurgical Perspective of Facial Fractures	136
<i>Anoop Kumar Singh and Suman Yadav</i>	
Subsection IV: Injuries to the Cranium	
12. Depressed Skull Fractures	151
<i>Ashish Chugh, Prashant Punia, Sarang Gotecha</i>	
13. Growing Skull Fracture	167
<i>Ishwar Singh and Varun Aggarwal</i>	

Subsection V: Intra-cranial Injuries

14. Traumatic Intracranial Epidural Hematoma 174
Manas Panigrahi, Ambresh A, Anoop Kumar Singh
15. Acute Subdural Hematoma 196
Anoop Kumar Singh
16. Chronic Subdural Hematoma 208
Anoop Kumar Singh and Ashish Acharya
17. Twist Drill Craniostomy 223
Mallika Sinha, Kamesh Kochanda, Ketan Hedao, Ambuj Kumar, YR Yadav
18. Endoscopic Treatment of Chronic Subdural Hematoma 230
YR Yadav, Shailendra Ratre, Jitin Bajaj, MN Swamy, Vijay Parihar, Mallika Sinha, Ketan Hedao, and Ambuj Kumar
19. Traumatic Brain Contusion and Hematoma 239
Anoop Kumar Singh
20. Penetrating Brain Injuries 258
Chhitij Srivastava, Manish Jaiswal, and Anoop Kumar Singh
21. Decompressive Craniectomy 269
Anoop Kumar Singh

Subsection VI: Traumatic Internal Compounding

22. Traumatic CSF Rhinorrhoea 286
CE Deopujari, N Shah, A Bhagwat
23. Cerebrospinal Fluid Otorrhea and Ear Encephalocele 309
Dwarakanath Srinivas, Harsh Deora, Anoop Kumar Singh, and Vinay Prakash Singh
24. Traumatic Pneumocephalus 324
Anoop Kumar Singh, Sarvpreet Singh Grewal, Ravindra Kumar Bind, and Ashish Acharya
25. Traumatic Basal Encephalocele 332
Ravi Sankar Manogaran, Ramandeep Sing Virk, Anoop Kumar Singh, and Sanjay Behari

Subsection VII: Skull Defect Repair

26. Cranioplasty 349
Gopalakrishnan CV, Dilip Panikar, and Anoop Kumar Singh

Subsection VIII: Cranial Nerve Injuries

27. Surgical Management of Optic Nerve Injury 367
Elena Bano-Ruiz, Pablo González-López, Javier Abarca-Olivas, and Juan Nieto-Navarro
28. Traumatic Cranial Neuropathy 385
Abhidha Shah, Chandrima Biswas, Anoop Kumar Singh, and Atul Goel

Subsection IX: Traumatic Intra-cranial Vascular Injuries

29. Vascular Complications of Head Injury 399
Hitesh Inder Singh Rai, Manmohan Singh, and Anoop Kumar Singh
30. Extracranial–Intracranial Bypass in Neurotrauma 414
Michael T. Lawton, Visish M. Srinivasan, Redi Rahmani, Stefan W. Koester, and Joshua S. Catapano

Section III: Miscellaneous

31. Postoperative Management in Head Injury 425
Ashish Aggarwal, Sunil Kumar Gupta, Kajal Jain, Manju Mohanty, and Mukilan Balasubramanian

Index 435