

## **Section one: General neurosurgery**

1. *Historical perspective*
2. *Informed consent and medico legal aspects of neurosurgery*
3. *Wrong Side Craniotomy and Wrong Level Spine Surgery – ‘res ipsa loquitur’*
4. *Medical complications in neurosurgery*
5. *Surgical complications in cranial and spine surgery (Position-related, pneumocephalus, pseudomeningocele and CSF leak, wound complications)*
6. *Venous injury and cerebral edema in cranial surgery*
7. *Post-operative hematoma after neurosurgery*

## **Section two: Cranial complications**

### **Vascular surgery complications**

8. *Overview*
9. *Intra-operative rupture and parent artery injury during aneurysm surgery*
10. *Cerebral Vasospasm: complications and avoidance*
11. *Complications of AVM microsurgery; steal phenomenon and management of residual AVM*
12. *Complications of cerebral bypass surgery*
13. *Complications of surgery for cavernomas*
14. *Complication of Carotid endarterectomy*

### **Skull base surgery complications**

15. *Overview*
16. *Complications in anterior cranial fossa surgery*
17. *Complications in middle cranial fossa surgery*
18. *Complications in posterior cranial fossa surgery*
19. *Complications of Chiari Malformation surgery*

### **Primary brain lesion resection complications**

20. *Primary brain lesion resection complications: An Overview*
21. *Complications following glioma surgery*
22. *Complications of surgery for pituitary tumors*
23. *Thalamic and insular tumors: minimizing deficits*
24. *Complications of surgery for pineal region tumors*
25. *Complications associated with surgery for intracranial infectious lesions : (tuberculosis, hydatid, neurocysticercosis)*

26. *Malignant Brain Swelling After Resection of Superior Sagittal Sinus Meningioma*

27. *Facial nerve and Auditory nerve deficit in GKRS for vestibular schwannomas*

### ***Pediatric neurosurgery complications***

28. *Complications of posterior fossa tumors: ependymoma/ medulloblastoma/ pilocytic astrocytoma*

29. *Craniopharyngioma: complications after microsurgery*

30. *Complications associated with Cerebrospinal Fluid Diversion*

31. *Complications After Myelomeningocele Repair: CSF Leak and Retethering*

### ***Functional and radiosurgery, Surgery for trigeminal neuralgia; Complications***

32. *Complications of various treatment options for trigeminal neuralgia*

33. *Complications of DBS*

34. *Complications following epilepsy surgery*

35. *Complications after Stereotactic Radiosurgery*

### ***Endoscopic surgery***

36. *Complications of endonasal endoscopy*

37. *Vascular injuries in transsphenoidal approach*

38. *Complications of ventricular endoscopy*

### ***Endovascular surgery***

39. *Access-related complications: (groin hematoma, dissection and pseudoaneurysm, contrast-nephropathy, air embolism)*

40. *Procedure-related complications: Aneurysms—Intraprocedural rupture, thromboembolic events, coil migration or prolapse into parent artery, and recurrent aneurysm management*

41. *Procedure related complications: AVM embolization*

42. *Procedure related complications: Stroke*

43. *Procedure related complications: CCF and AVF*

### ***Trauma***

44. *Complications after decompressive craniectomy and cranioplasty*

45. *Complications following surgery for chronic subdural hematoma*

### ***Section three: Spinal and peripheral nerve surgery complications***

#### ***General and Degenerative spinal disease surgery complications***

46. *Overview of General and Degenerative Spine Surgery Complications*

47. *Adjacent level disc degeneration and pseudoarthrosis*

48. *Graft related complications (Autograft, BMP, synthetic)*
49. *Procedure related complications (Inadvertent dural tear, CSF leak)*
50. *Complications of surgery at craniocervical junction*
51. *Neurologic deterioration after spinal surgery (including cauda equine)*
52. *Vascular injury during approach to lumbar spine*
53. *Vascular complications in cervical spine surgery (anterior approach and posterior approach)*
54. *Instrumentation related complications*
55. *Post-op spinal deformities: kyphosis, non-union and loss of motion segment*
56. *Complications of MIS*

***Spinal neoplastic and vascular lesion surgery complications***

57. *Complications in Spinal Cord Tumor Surgery*
58. *Complications of surgery for vertebral body tumors*
59. *Complications of surgery for spinal vascular malformations*
60. *Complications of surgery and radiosurgery in spinal metastasis*

***Spinal Trauma and peripheral nerve surgery complications***

61. *Complication of spinal fractures*
62. *Post-traumatic syringomyelia*
63. *Complications of Surgery for Peripheral Nerve Injuries and Tumors*