

Section 1: Basic principles of neuro-oncology

1. Fundamentals of neuropathology: introduction to neuropathology and molecular diagnostics

Sonika Dahiya and Shakti Ramkissoon

2. Surgical considerations for brain and spine tumors

Michelle Marie Williams, Stephen B. Tatter, and Adrian W. Laxton

3. Introduction to radiation therapy

Emily Schapira, Marc R. Bussière, and Helen A. Shih

4. Evidence-based approaches to chemotherapy for gliomas

Alessia Pellerino, Federica Franchino, Roberta Rudà, and Riccardo Soffietti

Section 2: Neuro-oncology imaging consults

5. Evaluation of a dural-based lesion

Carol Parks Geer and David Wayne Robinson

6. Evaluation of a supratentorial parenchymal brain lesion

Albert E. Kim and Elizabeth R. Gerstner

7. Evaluation of an infratentorial lesion

David E. Kram, Jacob J. Henderson, and Daniel E. Couture

8. Imaging of spinal lesions

Teddy Earl Kim, Carl Nechtman, and Wesley Hsu

9. Evaluation of peripheral nerve lesions

K. Ina Ly and Justin T. Jordan

Section 3: Approach to patients with primary and secondary CNS tumors

10. Approach to the meningioma patient

Jennifer Lynn Franke, Christina Jackson, and Michael Lim

11. Approach to the low-grade glioma patient

Carlos G. Romo, Ananyaa Sivakumar, and Matthias Holdhoff

12. Approach to the high-grade glioma patient

David Olayinka Kamson and Stuart Grossman

13. Approach to the CNS lymphoma patient

Ahmad Nader Kassem and David M. Peereboom

14. Approach to a brain metastasis patient

Michael H. Soike and Michael D. Chan

15. Approach to the leptomeningeal metastases patient

Jigisha Thakkar and Priya Kumthekar

Section 4: Inherited tumor syndromes in neuro-oncology

16. Approach to patients with the neoplasms associated with neurofibromatosis type 1, neurofibromatosis type 2, and schwannomatosis

Jaishri O. Blakeley, Shannon Langmead, and Peter de Blank

17. Approach to the patient with tuberous sclerosis

Mary T. Silvia and Roy Strowd

18. Approach to Von Hippel Lindau, Cowden disease, and other inherited conditions

Sapna Pathak, Thuy M. Vu, and Roy Strowd

Section 5: Neurologic complications of cancer

19. Neurologic complications of cancer

Andrea Wasilewski and Nimish Mohile

20. Paraneoplastic neurologic disorder syndromes

Luisa A. Diaz-Arias and John C. Probasco

21. Perineural spread of cancer

Kutluay Uluc, Laszlo Szidonya, Joao Prola Netto, and Prakash Ambady

22. Cancer-associated plexopathy

Mary Jane Lim-Fat, Patrick Y. Wen, and Ugonma N. Chukwueke

23. Cancer complications in patients with hematologic malignancies

Cristina Valencia-Sanchez, Molly Knox, and Maciej M. Mrugala

Section 6: Neurologic complications of radiation therapy

24. Approach to the patient with radiation necrosis

Jiayi Huang, Lauren E. Henke and Jian Campian

25. Neurologic complications of radiation

Christina Kehl Cramer and Tiffany L. Cummings

26. Uncommon radiation-induced neurologic syndromes

Shivani Sud, Courtney Michelle Vaughn, and Colette Shen

Section 7: Neurologic complications of systemic therapy

27. Approach to the patient with a delayed post-treatment CNS neurotoxicity

Amy Pruitt

28. Approach to chemotherapy-induced peripheral neuropathy

Taylor Brooks and Roy Strowd

Section 8: Neurologic complications of immune-based cancer therapies

29. Neurologic complications of immune checkpoint inhibitors

Sarah E. Mancone and Roy Strowd

30. Neurologic complications associated with CAR T-cell therapy

Stephen J. Bagley

Summary of clinical pearls

Roy Strowd