

University of Kentucky Department of Neurology

NEUROPATHOLOGY/NEUROSCIENCE

Introduction

This rotation is designed to provide the house officer with opportunity for a thorough review of neuropathology and time for intensive, independent study in the basic neurosciences. The purpose of this rotation is to allow the resident to review and refresh basic skills in neuroanatomy and pathology and to give the resident the opportunity for intensive study of basic neuroscience principles. The resident should view this time as critical learning time to solidify his basic foundation in the neurosciences as well as the opportunity for this experience to serve as board preparation.

I. PATIENT CARE

1. Improve understanding of when to appropriately order biopsies of brain, muscle, and nerve.
2. Improve understanding of biopsy methods for patient education.
3. Improve understanding of the limitations of biopsy-driven diagnosis.
4. Improve utility of integrating pathology results into patient care.
5. Improve knowledge and understanding in the workup, treatment and longterm care of patients with brain tumors.

II. MEDICAL KNOWLEDGE

1. Demonstrate improved fund of knowledge regarding neuropathological concepts.
2. Improve understanding of neuroanatomy.
3. Expand ability to identify normal and abnormal pathology on gross brain specimens, brain biopsy specimens and nerve and muscle biopsies.
4. Improve understanding of basic pathogenesis of neurological disorders on a biochemical and cellular level.
5. Improve understanding of genetically based diseases.
6. Improve ability to correlate imaging findings with gross and microscopic pathology.

III. PRACTICE-BASED LEARNING AND IMPROVEMENT

1. Identify and acknowledge gaps in personal knowledge and skills regarding pathological basis of disease and basic science concepts relevant to neurology.
2. Develop and implement strategies for filling in gaps in knowledge and skills.
3. Use knowledge gained on this rotation to improve your clinical use biopsies in neurological disease.

IV. INTERPERSONAL SKILLS AND COMMUNICATION

1. Communicate effectively with physician colleagues in pathology and the multi-disciplinary team caring for brain tumor patients.
2. Communicate effectively with all ancillary care personnel involved in the care of the patient.
3. Present patient information concisely and clearly, verbally and in writing.
4. Teach colleagues and medical students effectively.

V. PROFESSIONALISM

1. Demonstrate respect, compassion and integrity when dealing with patients and families.
2. Demonstrate sensitivity and respect for patients' age, culture, race, gender and religious beliefs.
3. Demonstrate a commitment to ethical principles of providing or withholding care, patient confidentiality and informed consent, and business practices.
4. Demonstrate a commitment to carrying out professional duties including punctuality, reliability, chart maintenance and independent learning and professional development.
5. Demonstrate professional respects for superiors, colleagues, students and all members of the health care team.

VI. SYSTEMS-BASED PRACTICE

1. Understand the impact and use of biopsies relevant to patient care and the burden of this expenditure in the global setting of our health care system.
2. Understand the impact on patients and the health care system regarding the costs involved with the care of the brain tumor patient.
3. Collaborate with other members of the health care team to assure comprehensive patient care.
4. Use evidence-based, cost-conscious strategies in the use of biopsies and cancer treatments.
5. Understand the long-term consequences of patient care in relation to the individual's socioeconomic status.

Duties

1. Residents will work extensively with the neuropathology faculty.
 - a. The resident will work with the neuropathology faculty to arrange reading times for joint review of brain biopsy slides and muscle and nerve biopsy slides.
2. The house officer will be responsible for checking out the independent study slide carousels on neuropathology from the neuropathology faculty. The resident is responsible for completing the neuropathology self-study curriculum by the end of the rotation.

3. The resident will use this time for independent study in the basic neurosciences. The resident is responsible for completing all of the reading assignments from the basic neuroscience reading list and articles provided by the faculty and distributed to you at the beginning of the rotation.
4. The resident will use the results of his/her latest in-service scores to identify areas in the basic sciences that he/she has deficiencies in and use this as an opportunity to correct those deficiencies. If the topics that the resident feels deficient in are not addressed by the reading list provided, then the resident is encouraged to identify faculty to help with gathering resources to supplement this reading list.