

Clinical Chemistry Rotation - Objectives

Patient Care

Procedural Skills

A. Objectives

1. Understand the operating principles of automated chemistry instrumentation
2. Understand the operating principles of special chemistry instrumentation
3. Understand the operating principles of toxicology instrumentation
4. Understand the operating principles of immunoassay instrumentation
5. Understand the operating principles of pediatric chemistry instrumentation
6. Understand the operating principles of automated blood gas analyzers
7. Manually calculate various commonly used laboratory parameters

B. Plan:

1. Bench-rotation throughout clinical chemistry laboratories at PMH
2. Level of R & S: Section Supervisor of section where instruments are located

C. Supervision/Assessment:

1. Methods of Assessment:

- a. End-of-Rotation Evaluation Form
- b. Trainee Competency Evaluation Form
- c. End-of-Module Quizzes/Calculations Exam on CD-ROM
- d. Bench-Rotation sign-off sheet

2. Observer(s):

- a. Laboratory managers
- b. Section Supervisors
- c. Clinical Chemistry Faculty

Interpretive Skills

A. Objectives

1. Interpret results of serum protein electrophoresis patterns
2. Interpret results of urine protein electrophoresis patterns
3. Interpret results of cerebrospinal fluid (CSF) isoelectric focusing patterns
4. Interpret results of CSF indices
5. Interpret maternal serum screening reports for neural tubular defects and Down syndrome
6. Interpret adrenal vein sampling reports
7. Interpret inferior petrosal sinus sampling reports
8. Interpret selective venous sampling for PTH reports
9. Interpret quality control (QC) Levey-Jennings chart

A. Plan:

1. Teaching Method: Review of reports with Clinical Chemistry Faculty
2. **Level of R & S:** Daily preparation of reports for joint review with Clinical Chemistry Faculty

B. Supervision/Assessment:

1. Methods of Assessment:

- a. End-of-Rotation Evaluation Form
- b. Trainee Competency Evaluation Form
- c. Module Quizzes/Calculations Exam

2. Observer(s):

- a. Section Supervisors
- b. Clinical Chemistry Faculty