

How to Teach Coma in a Neurology Clerkship

Ralph F. Józefowicz, MD
University of Rochester

Coma Principles

- Anatomy of consciousness
- Four causes of coma
- Evaluation of coma
- Treatment of coma

Anatomy of Consciousness

- One cerebral hemisphere
 - “Content of consciousness”
- Brain stem reticular activating system
 - “Awakens” the cortex

Four Causes of Coma

- Supratentorial lesions
- Infratentorial lesions
- Metabolic causes
- Psychogenic causes

Evaluation of Coma

- Neurologic exam – brain stem
 - Pupillary light reflex
 - Oculocephalic reflex (ice water calorics)
 - Corneal reflex
 - Gag reflex
- Head CT scan – cerebral hemispheres
- Lab work – metabolic causes

Treatment of Coma

- Airway/Breathing/Circulation
- Naloxone/Glucose/Thiamine
- Treat specific causes

How to Teach Coma

- Clinical lecture
- Case studies
 - The Unresponsive Undertaker
 - The Stuporous Spa Salesman
 - The Comatose Cashier
- Coma rounds
- Individual patient encounters