

EMCP 502: Neurologic, Ophthalmologic, ENT, and Psychiatric Emergencies

Neurologic Objectives

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to:

1. List the main components of the neurologic examination.
2. Explain the importance of time of symptom onset when considering a diagnosis of possible stroke.
3. Compare and contrast the pathophysiology, clinical presentation, diagnostic evaluation, and treatment of TIA versus CVA.
4. Describe the role of acute blood pressure management in the stroke patient.
5. List the exclusion criteria for TPA in the stroke patient.
6. Describe how a patient with a subdural or intracerebral hemorrhage may present and some of the risk factors for these conditions.
7. Explain the role of blood thinning reversal agents and antihypertensives in the acute treatment of intracranial hemorrhage.
8. Describe the appropriate diagnostic evaluation and treatment of a patient that presents with altered mental status/coma.
9. Explain the difference between central and peripheral vertigo.
10. List the main causes of ataxia and gait disturbance.
11. Describe the clinical evaluation and disposition of a patient that presents with acute onset of ataxia.
12. Describe the benefits and potential risks of the following imaging modalities:
 - o CT, CTA, MRI/MRA, conventional angiogram
13. Compare and contrast the clinical presentation, diagnostic evaluation, and treatment of following types of headaches: tension, migraine, cluster, spinal, meningitis, and intracranial bleed.
14. Explain the role of CT imaging and lumbar puncture in the diagnostic evaluation of a suspected subarachnoid hemorrhage.
15. Describe the presentation, diagnostic evaluation, and treatment of the following infectious and inflammatory conditions: encephalitis, brain abscess, epidural abscess, meningitis, myelitis, neuritis, and neuropathies.
16. Describe the following types of seizures: absence, focal, generalized, and febrile.
17. Define status epilepticus and explain the management of a patient with this condition.
18. Define Todd's paralysis.
19. Compare and contrast the diagnostic evaluation and treatment of a patient that presents with a first time seizure versus a breakthrough seizure.
20. Explain the significance of a post traumatic seizure.
21. List some of the causes of seizures that are not the result of a primary neurologic problem.
22. Describe the clinical presentation and diagnostic evaluation of an intracranial mass.

23. Compare and contrast the clinical presentation and treatment of Bell's palsy versus trigeminal neuralgia.
24. Explain some of the symptoms a patient may report that should prompt one to consider the diagnosis of multiple sclerosis.
25. Explain how an exacerbation of multiple sclerosis may present and the appropriate work up and disposition.
26. Describe a dystonic reaction, possible etiologies, and treatment options.
27. Describe the presentation, work up, and treatment of pseudotumor cerebri.
28. Describe the common patient scenarios in which the diagnosis of spinal cord compression should be considered. Explain the diagnostic evaluation and treatment of this condition.
29. Describe the presentation and treatment of normal pressure hydrocephalus.
30. Explain the clinical presentation, diagnostic evaluation and treatment of VP shunt malfunction or infection.

Ophthalmologic Objectives

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to:

1. List the various types of conjunctivitis and their treatment.
2. Describe the presentation and treatment of the following ophthalmologic emergencies:
 - HSV and Herpes zoster infections of the eye.
 - Blepharitis.
 - Corneal abrasions
 - Corneal ulcer
 - Dacrocystitis
 - Periorbital and orbital cellulitides
 - Acute angle closure glaucoma
 - Iritis and chorioretinitis
 - Optic neuritis
 - Retinal detachment
 - Ruptured globe
 - Subconjunctival hemorrhage
 - Hyphema.
 - Orbital blowout fracture.
 - Ultraviolet keratitis
 - Ocular chemical exposures
 - Ocular foreign bodies

3. List disorders of the lacrimal system and their respective treatments.
4. Compare and contrast a chalazion and hordeolum.
5. Discuss papilledema and its implications.
6. Name the various kinds of retinal vascular syndromes and their treatment.
7. List the types of eyelid lacerations that should be repaired by an ophthalmologist.
8. Compare and contrast a hordeolum and a chalazion.
9. Explain how the following disease may affect the eye: Giant cell arteritis, multiple sclerosis, idiopathic intracranial hypertension, Bell's Palsy, Posterior communicating artery aneurysms, and Horner's syndrome.

ENT Objectives

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to:

1. Discuss the management of foreign bodies of the ear.
2. Describe the presentation and management of labyrinthitis.
3. Explain the presentation and treatment of mastoiditis.
4. Define Meniere's disease.
5. Discuss the evaluation and treatment of otitis externa, otitis media, and tympanic membrane perforation.
6. Describe the management of lacerations of the ear.
7. Compare and contrast the clinical presentation, diagnostic evaluation, and treatment of anterior versus posterior epistaxis.
8. Discuss the management of nasal foreign bodies.
9. Evaluate the diagnosis and treatment of acute and chronic sinusitis.
10. List treatment options for rhinitis.
11. Discuss the clinical presentation, diagnostic evaluation, and treatment of the following infectious/inflammatory disorders: Ludwig's angina, stomatitis, parotitis, epiglottitis, laryngitis, tracheitis, oral candidiasis, periapical abscess, peritonsillar abscess, pharyngitis, retropharyngeal abscess, sialolithiasis, dentalgia, TMJ disorders, gingival disorders.

Psychiatric Objectives

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to:

1. Explain the various emergent medical conditions that can masquerade as psychiatric disorders.
2. Apply the mental status examination in the evaluation of the psychiatric patient.
3. Evaluate the various criteria employed in determining the appropriate disposition of the psychiatric patient (voluntary vs. involuntary admission, discharge, or medical admission).
4. Describe the various factors used to evaluate suicide risk.
5. Appraise the indications, contraindications, and adverse effects of commonly used psychiatric medications used in the acute setting, including antipsychotics and anxiolytics.
6. Demonstrate the ability to use appropriate methods to restrain (e.g., chemical, physical) an acutely agitated or violent patient.
7. Describe the presentation, differential diagnosis, and treatment of common Axis I disorders that present to the ED, including:
 - Schizophrenia and other psychotic disorders
 - Mood disorders
 - Anxiety disorders
 - Substance induced disorders
 - Cognitive disorders (e.g. delirium, dementia)
 - Adjustment disorders
 - Eating disorders
 - Somatoform disorders
 - Fictitious disorders
 - Psychiatric disorders due to a general medical condition
8. Describe the diagnostic tests that may be indicated in the evaluation of a psychiatric patient.
9. Define the process by which alcohol and drug abuse is both identified and treated.
10. Describe the possible consequences of alcohol and sedative hypnotic withdrawal. Know the proper treatment of impending and active withdrawal.