

Neurologic Emergencies in Pregnancy

Objectives

- Learn how to differentiate between obstetric and non-obstetric causes of confusion and apply diagnostic frameworks effectively
- Recognize life-threatening conditions associated with confusion in pregnancy
- Implement multidisciplinary care strategies for pregnant women presenting with acute confusion
- Identify the risk factors for neurologic events during pregnancy and understand how physiological changes in pregnancy can increase the risk of such events
- Describe the symptoms and clinical presentations that should prompt evaluation for neurologic emergencies in pregnant individuals
- Collaborate effectively with other medical specialists to provide early and aggressive neurologic care, ensuring improved outcomes while optimizing fetal well-being care for the mother-fetus dyad

Content Outline

1. Confusion in Pregnancy
 - A. Need for multidisciplinary collaboration
 - B. Systemic approach to assessment
 - C. Importance of considering obstetric and non-obstetric causes
 - D. History-taking and physical examination
 - E. Radiological investigations in pregnancy
2. Life-Threatening Diagnoses Associated with Confusion in Pregnancy
 - A. Wernicke's encephalopathy
 - B. Hyponatremia and hypercalcemia
 - C. Acute fatty liver of pregnancy management
 - D. Thrombotic thrombocytopenia purpura
 - E. Pre-eclampsia and posterior reversible encephalopathy syndrome
3. Key Considerations with Patient Presenting with Confusion in Pregnancy
 - A. Treat pregnant women as if they are not pregnant unless necessary
 - B. Avoid clinical inertia
 - C. Emphasis on systematic assessment and early diagnosis
 - D. Importance of multidisciplinary care for optimal maternal and fetal outcomes
4. Neurologic Emergencies in Pregnancy
 - A. Risk factors and physiological changes
 - B. Symptoms and red flags
 - C. Common neurologic emergencies
 1. Stroke (ischemic and hemorrhagic)
 2. Seizures (including eclampsia and status epilepticus)
 3. Meningitis
 4. Pituitary apoplexy
 5. Central venous thrombosis
 6. Reversible cerebral vasoconstrictive syndrome
5. Diagnostic and Management Algorithms for Neurologic Emergencies in Pregnancy
 - A. Imaging considerations during pregnancy
 - B. Stroke management
 - C. Seizure management
 - D. Multidisciplinary approach to care

6. Specialized Neurologic Emergencies in Pregnancy
 - A. Autonomic dysreflexia in spinal cord injury
 - B. Myasthenia gravis crisis
 - C. Posterior reversible encephalopathy syndrome

Reading Material Resources

Module WB2813: Neurologic Emergencies in Pregnancy is based on the resources listed below. A copy of each resource is included with the module.

Acute confusion in pregnancy, Hill, et al., *Clinical Medicine* 25 (2025), 1-5

Neurologic Emergencies in Pregnancy, Wesley, et al., *Obstetrics and Gynecology*, Vol. 144, No. 1, July 2024, 25-39