Issues in Perinatal Brain Injury

Content Outline

1. Brain Injury
   1.1 Hypoxic injury
      1.1.1 Pathophysiology
      1.1.2 Phases
         1.1.2.1 Latent
         1.1.2.2 Secondary
   1.2 Other brain injury
      2.1 Cerebral palsy
      2.2 Seizures
      2.3 Perinatal arterial stroke

2. Mechanisms of Hypothermic Neuroprotection
   2.1 Cooling Effects
      2.1.1 Reperfusion
      2.1.2 Latent phase
      2.1.3 Secondary phase
   2.2 Cell Death
      2.2.1 Delayed programmed death
      2.2.2 Terminal
   2.3 Role of Hypothermia
      2.3.1 Inflammatory second messengers
      2.3.2 Excitotoxicity
      2.3.3 Mitochondria preservation
      2.3.4 Growth factor induction
   2.4 Secondary phase
      2.4.1 Cerebral metabolism
      2.4.2 Secondary cytotoxic edema
      2.4.3 Seizures

Reading Material Resources

Module WB1624: Issues in Perinatal Brain Injury is based on the resources listed below. A copy of the resources are included with the module.


Mechanisms of Hypothermic Neuroprotection, Drury et al., Clinics in Perinatology, 41 (2014), pages 161-175