

# **Eclampsia**

When severe preeclampsia progresses further, the pregnant woman can develop eclampsia. Eclampsia is characterized by seizure activity or coma in the pregnant woman with severe preeclampsia. The seizure activity can occur before, during, or after birth. Eclampsia occurs due to neurologic complications related to preeclampsia. These neurologic complications result in increased central nervous system (CNS) irritability.



**PLAY PICMONIC** 

#### **Mechanism of Action**

## **Increased Central Nervous System Irritability**

**Up-arrow CNS-brain Irritated** 

In severe preclampsia, the CNS becomes irritated as a result of vasospasm and decreased organ perfusion. This irritation causes a cortical brain spasm that results in headaches, hyperreflexia, seizure activity, and the progression to eclampsia.

#### Signs and Symptoms

# Hyperreflexia

Hiker-reflex-hammer

Due to CNS irritability and cortical brain spasm, the pregnant individual's reflexes become hyper-exaggerated, signifying the possible development of eclampsia.

# **Positive Ankle Clonus**

Positive Ankle Clowns

Due to the cortical brain spasm, the ankle may display rapid muscular contraction and relaxation, appearing as a rhythmic tremor.

# Headaches

Head-egg-lump

As hypertension progresses without proper management, the pregnant woman may experience severe headaches, significant of increased pressures within the vessels of the brain.

#### **Visual Disturbances**

Wavy Eyes

Visual disturbances may occur as a result of retinal arteriolar spasm that develops due to the progression of hypertension and vasospasm that occurs in severe preeclampsia.

#### **Epigastric or RUQ Pain**

E-pick-gas and RUQ Pain-bolts

Epigastric, or right upper quadrant (RUQ), pain is usually an ominous sign, and the patient frequently complains of this pain immediately before the onset of the seizure. In many cases, this pain/feeling is a harbinger of an impending seizure. This pain could also represent worsening hepatopathy from pre-eclampsia.

#### Seizures

Caesar

Due to cortical brain spasm and increased CNS irritability, seizures can occur in the pregnant individual. These seizures can occur before, during, or after birth and are significant to eclampsia. Typical seizure care includes airway management, administration of oxygen, turning the patient on their side, and padding side rails.



## Coma

Comb

Due to severely increased CNS irritability, the patient can progress to a comatose state. This progression is a severe complication of eclampsia.

## Considerations

# Don't Leave Bedside

Not Allowed to Leave Bedside

It is imperative in this obstetric emergency to call for help and not leave the patient alone.

## **Magnesium Sulfate**

Magnesium-magazine with Sulfur-matches

This medication is given to control seizures in patients with eclampsia. Calcium gluconate should be available to reverse any effects of magnesium toxicity (depressed DTRs, bradypnea, oliguria), as the patient has more than likely been receiving magnesium sulfate prior to the onset of seizure activity. It is crucial to monitor for respiratory depression.