

# Eclampsia

**Eclampsia** is an attack of tonic-clonic convulsions in a pregnant woman following previous severe preeclampsia or superimposed preeclampsia. There are also forms without preeclampsia ( eclampsia sine preeclampsia ) or forms without convulsions , only unconsciousness ( eclampsia sine eclampsia ). Seizures occur most often at the end of pregnancy and during childbirth , rarely also in the sixth trimester .

## Pathogenesis

The cause of eclampsia is a generalized spasm in the CNS , which leads to hypoxia and then to brain edema , resulting in morphological changes in the brain tissue.

## Progress [ edit | edit source ]

1. *Prodrome phase* - restlessness, twitching of the face, turning of the bulbs and head to the side, severe headaches , nausea , pain in the epigastrium, vomiting .
2. *The phase of tonic convulsions* - affecting the masticatory muscles , chest muscles and diaphragm ( apnea ) , then back muscle spasms - opisthotonus , upper limbs - boxing position, lasts a few seconds.
3. *The phase of clonic convulsions* - the body is reeling in uncoordinated movements, the hands perform a movement reminiscent of tambora drumming, may last several minutes.
4. Coma - after the convulsions subside, the woman falls into a coma , mydriasis , hyporeflexia, deep breathing, after waking up there is amnesia .
  - If untreated, the seizure may recur and *status eclampticus* occurs .

## First Aid

The first aid kit is prepared in the delivery room and contains: airway (complete set) to secure the airways, diazepam (we apply 5–10 mg iv) and MgSO<sub>4</sub> 4–6 g/5 min iv The use of magnesium alone has better results, than using diazepam alone.<sup>[1]</sup>

- We will introduce a nasogastric tube (prevention of aspiration ) , a permanent catheter , oxygen, and put the woman in a dark room before giving birth.
- If a seizure occurs, regardless of the fetus, we terminate the pregnancy by caesarean section . It is better to bring the woman out of the coma and stabilize her before the operation, but in an urgent situation we also operate in a coma.

## Complications

Complications include CNS hemorrhage , pulmonary edema , circulatory failure , uterine hypertonus, and premature placental abruption with development of DIC , anemia , hepatorenal failure. After managing the acute condition - in the ICU, we monitor, antihypertensive treatment continues , we apply MgSO<sub>4</sub> , we maintain circulation, we monitor. Then we translate to Sect. six-month-old - we monitor BP every 4 hours, laboratory. After discharge, we check once a week for 6 weeks (obstetrician and internist).

## Links

### Related Articles

- Hypertension in pregnancy
- Hypertension
- Antihypertensives
- Preeclampsia

### External links

- Eclampsia - interactive algorithm + test
- Preeclampsia and eclampsia doc. MD Alena Měchurová

### References

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- 1. DULEY, Lelia, David J HENDERSON-SMART and Godfrey JA WALKER. Magnesium sulphate versus diazepam for eclampsia. *Cochrane Database of Systematic Reviews*. 2010, year -, vol. -, p. -, ISSN 1465-1858. DOI: 10.1002/14651858.cd000127.pub2 .

