

# Convulsions (pediatrics)

## Convulsions in children

Spasms in childhood are a manifestation of various diseases. Convulsions in children are among the acute conditions that need to be dealt with urgently. A spasm is a condition in which there is an excessive and prolonged contraction of various muscles. A cramp can affect one muscle or entire muscle groups. Spasms that last longer than 10 minutes are called prolonged spasms. Recurrent seizures are those that recur frequently.

### Diseases related to convulsions

- **Spasms in diseases of the nervous system**

These convulsions most often occur in connection with trauma, intracranial bleeding, congenital anomalies and epilepsy.

- **Infection spasms**

Sepsis, tetanus, nervous system infection (inflammation of the meninges).

- **Metabolic cramps**

Caused by a drop in blood sugar (diabetes, starvation) or a drop in magnesium and calcium.

- **Spasms during intoxication**

They can be caused by drugs containing acetylsalicylic acid, alcohol or nicotine.

- **Febrile convulsions**

They are formed at a temperature higher than 38 °C.

- **Psychogenic convulsions**

Hysterical convulsions and affective convulsions belong to this group. Affective convulsions occur in children mainly during conflicts. They start with crying, then the child holds his breath, turns blue and convulses.

### Causes of convulsions in children

#### Epilepsy (pediatrics)

- idiopathic (70-80%);
- secondary (malformation of the CNS, occlusion of cerebral vessels, brain damage by congenital infection, hypoxic-ischemic encephalopathy, intraventricular hemorrhage);
- CNS tumors;
- neurodegenerative disease;
- neurocutaneous syndromes.

#### Non-epileptic

- febrile convulsions;
- metabolic causes (Gly, Ca, Mg, Na);
- head injuries;
- meningitis, encephalitis;
- poisoning.<sup>[1]</sup>

#### Treatment

First of all, it is necessary to ensure a sufficient amount of oxygen for the organism (release and secure the airways) and eliminate convulsive activity. The most commonly used anticonvulsant drug is diazepam in a dose of 2.5-5 mg < 15kg < 10 mg. It is only after the spasms have subsided that it is possible to treat the cause of their occurrence.

#### DIAZEPAM DOSAGE

rectal suppository in children  
2.5-5 mg per weight up to 10 kg  
5 mg per weight of 10-15 kg  
5-10 mg per weight of 15-30 kg  
10 mg per weight > 30 kg

## Links

## Related Articles

- Febrile convulsions
- Epilepsy (Pediatrics)
- Impaired consciousness and convulsions (Pediatrics)
- Convulsions

## References

1. LISSAUER, - CLAYDEN,. *Illustrated Textbook of Paediatrics*. 3. edition. Elsevier, 2007. pp. 452. ISBN 978-07234-3398-9.