

**Infantile spasms are a medical emergency. Immediate treatment is critical.**



**Signs & Symptoms**

**Spasm Timing**

- Duration 1 second?
- Every 5-15 seconds?

**Spasm Movements**

- Wide eyes?
- Head drop?
- Raising shoulders/arms?

**Cluster Timing**

- Occurring in clusters from one to several a day
- Often occur after waking

**Developmental Problems**

- Loss of Skills?
- Less alert?
- Developmental concerns?

**Yes**

**Testing**

**Video EEG**

- Hypsarrhythmia?  
\*Infantile Spasms can still occur without the presence of hypsarrhythmia

**Yes**

**Confirming Diagnosis**

**Infantile Spasms**

- Other names for IS
- Epileptic spasms
  - West Syndrome

**Yes**

**Treatment**

Medications

**Vigabatrin**

**Hormonal therapy**

Prednisolone or ACTH

**Epilepsy surgery**

Non-medicine therapies

**Ketogenic diet**

**Confirmed Infantile Spasms? What's the Cause?**

*There are hundreds of possible causes of infantile spasms. Almost any disease or disorder of the brain can cause it.*

**3 known types of causes**

**Abnormalities in Brain Structure**

**Brain Injury After Birth**

**Genetic Disorders Metabolic Condition**

**Sometimes there is no known cause of IS**

**Additional Tests**

**MRI**

- Structural abnormalities?
- Hypoxia?
- Malformations of cortical development?

**Genetic testing**

- The common genetic disorders:
- Tuberous sclerosis complex
  - Down Syndrome
  - CDKL5 Deficiency disorder
  - Dup15q syndrome
  - Aicardi syndrome

**Prognosis**

**Common Reasons for Poor Outcomes**

- Relapse: treatment is often only temporarily successful
- Prior disease: IS often occurs in with other severe brain diseases

**20% will develop normally**

- If the child with IS is treated quickly and successfully
- The child does not have another severe brain disorder

**Resources**

**Infantile Spasms Action Network**

ISAN is a collaborative network focused on raising awareness for infantile spasms.

[www.infantilespasms.org](http://www.infantilespasms.org)

**Brain Recovery Project**

BRP provides research-based information to help understand when a child's seizures are drug-resistant.

[www.brainrecoveryproject.org](http://www.brainrecoveryproject.org)