

REYES SYNDROME

Unless Diagnosed and Treated Successfully, Death is common, Often Within a Few Days

Reye's Syndrome Most Often Affects Children Under 18 Years of Age

Viral infections are common in children, however in some cases viral infections can result in a life threatening condition known as Reye's syndrome. It is important to monitor children closely for symptoms even after they have recovered from a viral infection. While Reye's syndrome symptoms could be attributed to other conditions, and without thorough testing a patient can go undiagnosed which can lead to death. Early detection of Reye's syndrome is crucial and could be lifesaving.

This guide will highlight what Reye's syndrome is, its symptoms, how it is diagnosed and treatment options.

01 | What is Reye's Syndrome?

Reye's syndrome is a very rare but extremely serious condition involving swelling of the liver and the brain. This condition most often affects children and teenagers recovering from a viral infection like the flu or chickenpox.

02 | Cause

The exact cause of Reye's syndrome is unknown; however links have been made between patients with an underlying fatty acid oxidation disorder and taking aspirin during viral infections. Fatty acid oxidation disorders are a group of inherited metabolic disorders in which the body is unable to breakdown fatty acids because an enzyme is missing or not working properly in the system. Reye's itself may be an underlying metabolic condition that is triggered by viruses or exposure to certain toxins.

03 | Symptoms

The signs of Reye's usually appear about three to five days after the onset of a viral infection. With Reye's a patient's blood sugar typically drops while ammonia and acidity in the blood rises. The liver may begin to swell and develop fatty deposits; swelling of the brain is also possible. A patient suffering from Reye's syndrome may suffer the following:

- Rapid breathing
- Diarrhea
- Persistent or continuous vomiting
- Irritable or aggressive behavior
- Excessive Lethargy
- Decreased level of consciousness

- Seizures

04 | Diagnosis

There is not a specific test for Reye's syndrome, but rather the symptoms. Many diagnostic tests may be needed to properly diagnose Reye's. Testing may include:

- Urine and Blood tests - to search for markers for metabolic disorders
- Spinal Tap - to rule out other diagnosis' and symptoms
- Liver Biopsy - to rule out or confirm the cause of some symptoms
- CT Scan or MRI- These scans may rule out behavioral symptoms and diagnosis'
- Skin Biopsy- Tests for fatty acid oxidation disorders

05 | Treatment

Reye's syndrome is usually treated in the hospital, while serious and critical cases may be treated in intensive care (ICU). Treatments are performed and based on the severity of the illness, full recovery is possible. If a patient has had severe and traumatic symptoms, they may suffer neurological or organ damage or death. Combating the symptoms is the only way to treat Reye's syndrome. During treatment a patients may receive:

- Intravenous Fluids- glucose and electrolyte solution
- Diuretics- used to decrease intracranial pressure and aid in waste excretion
- Medications- to prevent bleeding, supplement nourishment, help with symptoms and make a patient as comfortable as possible.

For additional resources on Reye's syndrome and its causes please visit: <http://www.reyessyndrome.org>

Did You Know?

Children taking aspirin are at greater risk for Reyes syndrome

References

<http://www.mayoclinic.org/diseases-conditions/reyes-syndrome/basics/definition/CON-20020083>

http://www.medicinenet.com/reyes_syndrome/article.htm