Dear Alice,

I survived Reye's syndrome as a child with no known side effects. Now, years later, I would like to learn more about Reye's, but can find very little information. Do you have any ideas where to look? Thanks!

Answer

Dear Reader,

Great to hear that you are interested in learning more! Reye's syndrome, named after Australian pathologist R. Douglas Reye (who discovered it), is a rare, but serious and potentially fatal condition and the cause is not well understood. What is known is that it typically affects children and teenagers recovering from a viral illness (usually the flu or chickenpox). It also appears to be associated with the use of aspirin during the recovery period. Unfortunately, the symptoms of Reye's syndrome are frequently mistaken for meningitis, encephalitis, diabetes, poisoning, or mental illness, among others. However, knowing what to look for and when to seek medical treatment will increase the chances that a person will fully recover without any lasting issues (like you).

Though Reye's syndrome may develop from or be triggered by a contagious viral infection, a person cannot "catch" it. Those at the highest risk for Reye's are children ages four to twelve — though some cases have been reported in adults. It affects all organs of the body; but, the liver and brain are most prone to damage. In addition to an increase in brain pressure, Reye's syndrome causes an abnormal accumulation of fat in the liver and other organs. Symptoms tend to occur at three to five days following the onset of a viral infection and develop rapidly. They can include diarrhea and rapid breathing (in children under the age of two), and vomiting, tiredness, and lethargy (in older children). As the syndrome progresses, another set of increasingly serious symptoms may crop up, which include:

- Irritability or aggressive behavior
- Confusion and hallucinations
- Weakness or inability to move limbs
- Seizures
- Marked lethargy and decreased consciousness

List adapted from the Mayo Clinic.[2]

It is crucial to get medical attention for a person who is experiencing these more serious
symptoms, particularly if they’re having seizures or have lost consciousness.

Early diagnosis is vital: Reye’s can result in brain damage, but it can also be fatal within days if left untreated. Once diagnosed, the condition is managed, through intravenous (IV) fluids, diuretics to reduce brain swelling, and medication to prevent bleeding. If a person has difficulty breathing, a ventilator (breathing machine) may also be used. Many people recover completely from Reye’s syndrome (up to 80 percent), particularly because early diagnosis and treatment has improved over the years. Though it’s rare, there are varying degrees of permanent damage to the liver and/or nervous system possible. Recovery is related to the stage at which treatment for the condition begins, with later stage treatment carrying the most risk for permanent damage and disability.

There are only a few potential links researchers have made to this syndrome. Because some research has made an association between taking aspirin for viral infections and the development of Reye’s syndrome, it’s recommended that children, under the age of 19, only use other over-the-counter pain relievers (e.g., ibuprofen, naproxen sodium, or acetaminophen) instead. To make sure that a product doesn’t contain aspirin, it’s a good idea to look at the label for acetylsalicylic acid, acetylsalicylate, salicylic acid, and salicylate (all of which are other names for aspirin). Reye’s syndrome can still occur if aspirin is not taken; however, heeding this advice can reduce the chances of developing the disease. Additionally, some researchers believe that the syndrome may actually be a metabolic condition, that goes unnoticed (i.e., is asymptomatic) and is triggered by a viral infection. It’s also thought that exposure to substances like herbicides, insecticides, and paint thinner may increase the risk of Reye’s as well.

To learn even more about this condition, check out the Mayo Clinic[3] and the American Liver Foundation[4] websites.

To your health!

Alice!

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