



GROUP A STREPTOCOCCAL (GAS) INVASIVE DISEASE

What is group A streptococcal (GAS) invasive disease?

Streptococcus pyogenes (group A *Streptococcus*) bacteria are commonly found in the throat and on the skin. Many healthy people carry these bacteria and have no symptoms of illness. Mild infection like impetigo or strep throat are common. Invasive group A streptococcal disease is a serious, and sometime life-threatening disease, that occurs when *Streptococcus pyogenes* bacteria invade parts of the body where bacteria are not usually found, including blood, cerebral spinal fluid, lungs, wounds, deep muscle and fat tissue.

How is the bacteria spread?

The bacteria is spread by direct contact with discharges from the nose and throat of infected persons, or by contact with infected wounds or sores on the skin. Household items like plates, cups and toys do not play a major role in spread of the disease.

How common is invasive GAS disease?

About 9,000-11,500 cases of invasive GAS disease occur each year in the United States, resulting in 1,000-1,800 deaths annually. Streptococcal Toxic Shock Syndrome (STSS), a rapidly progressive form of infection that causes shock and failure of internal organs (brain, liver, lungs, kidneys) and necrotizing fasciitis, a destructive infection of muscle and fat tissue, each comprise an average of about 6%-7% of these invasive cases. In contrast, there are several million cases of strep throat and impetigo each year.

Who gets invasive GAS disease?

Anyone can get invasive GAS disease or STSS. People with underlying health problems such as diabetes, chronic heart, lung or kidney problems, cancer and HIV infection are at greater risk to develop invasive GAS disease. A break in the skin, such as a cut or surgical wound, or chickenpox may increase a person's risk. There is some evidence that close contacts of an isolated case (such as family/household members and health care providers) may be at increased risk for infection with GAS due to direct contact with secretions from infected persons. The need for preventative antibiotics for close contacts is determined on a case by case basis.

How can GAS infections be prevented?

The spread of Group A Streptococcal Infection may be reduced by good handwashing, especially after coughing and sneezing, before preparing foods, and before eating. Persons with sore throats should be seen by a physician for possible testing and treatment. All wounds should be kept clean and observed for signs infection, including increased redness, swelling, and drainage. A person with an infected wound and fever should seek appropriate medical care.

How is invasive GAS disease treated?

GAS infections can be treated with many different antibiotics. Early treatment may reduce the risk of severe complications. Intravenous fluids and other supportive measures typically used in the management of shock and multi-organ failure are often necessary.

FOR MORE INFORMATION: 092013
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