

Invasive Group A Streptococcus

What Is Group A Streptococcus?

Group A Streptococcus (GAS) is a bacteria that is usually found in the throat or on the skin. Some people carry these bacteria without symptoms. Others have been known to develop infections such as “strep throat,” or impetigo.

A more severe form of infection with this type of bacteria occurs when Group A Streptococcus enters into sterile sites in the body such as blood, muscle, or tissue. This is known as Invasive Group A Streptococcus (iGAS). The bacteria can enter into your body through breaks in the skin or open sores. Infections can also occur when a person’s body can no longer fight off the bacteria. Necrotizing fasciitis (flesh-eating disease) and Streptococcal toxic shock syndrome (STSS) are two uncommon but serious forms of iGAS.

Necrotizing fasciitis (flesh-eating disease) quickly destroys layers of muscle, fat, and skin tissue when left untreated. STSS can cause a quick drop in blood pressure and can eventually cause failure of organs such as kidneys, liver, and lungs.

What Are the Symptoms of iGAS?

Necrotizing fasciitis:

- Severe pain and swelling, often rapidly increasing;
- Fever; and
- Redness at wound site.

Streptococcal toxic shock syndrome (STSS):

- Fever;
- Rapid onset general or local severe pain, usually in the arm or leg;
- Dizziness;
- Flu-like symptoms;
- Confusion; and
- Flat red rash over large areas of the body (occurs in 10% of cases).

How Is iGAS Spread?

Spreading iGAS is a relatively low risk. Those with throat or skin infections are most likely to spread infection. iGAS is spread by direct contact with infected wounds or sores. Since iGAS can be found in both the mouth and throat of those infected, there is also a chance that the bacteria can be spread by sneezing or coughing.

What Special Precautions Are Required for iGAS? What Do I Need to Know?

Together we can take steps to stop the spread of iGAS to other patients in the hospital:

- You will stay in a room by yourself until 24 hours of effective treatment;
- Everyone who cares for you or visits you will wear gloves, a long-sleeved gown and a mask;
- A sign for “Droplet & Contact Precautions” will be placed on your door to remind everyone who enters your room about the special steps;
- Your room and the equipment used in your room will be cleaned and disinfected regularly;
- Everyone who leaves your room will clean their hands; and
- Your activities outside your room will be restricted until your special precautions are removed.

What About My Family and Visitors?

Family and friends can still visit you in the hospital. The signs outside your room will show how to safely wear the mask, gloves and gown. Before leaving your room, your family and visitors must remove the mask, gloves and gown. Then, they must clean their hands with alcohol hand rub. We ask that your family and visitors not assist other patients. Instead, they can assist by using the call bell to ask for help.

Who Is at Risk for iGAS?

If you come in contact with someone who has iGAS, you have a relatively low chance of getting the disease. In some cases involving close contacts (those living with the infected person), a throat or skin infection may result. These may increase your risk to getting iGAS:

- Chronic illnesses (cancer, diabetes, lung disease);
- Steroid use;
- Persons with skin lesions or surgical wounds;
- Advanced age;
- Alcohol abuse; and
- Injection drug use.

What Is the Treatment for iGAS?

There are several antibiotic treatments for iGAS, however, high doses of penicillin or clindamycin are recommended. In severe cases the person may be admitted to an Intensive Care Unit. In cases of necrotizing fasciitis, surgery is usually required to remove the infected tissue and help prevent the spread of the infection. Early recognition and treatment can help reduce the risk of death.

Questions? Infection Prevention and Control department 519-464-4400 Ext. 5253.

References:

Center for Disease Control: Group A Streptococcal Disease (May 7, 2020)

<https://www.cdc.gov/groupastrep/diseases-public/index.html>

Public Health Ontario: recommendations on Public Health management of invasive Group A Streptococcal (iGAS) Disease (September 2014)

<https://www.publichealthontario.ca/-/media/documents/I/2014/igas-management-recommendations.pdf?la=en>