

Invasive Group A streptococcal infections

What is group A streptococcus?

Group A streptococcus (GAS) is a bacterium found in the throat and on the skin and in most people it does not cause any symptoms.

How does it spread?

As the bacterium is found in the throat and on skin it may be passed from one person to another through sneezing, kissing and skin contact. Some people may carry it without any symptoms of illness. This is known as being colonised. In other people the bacterium can cause illness. This is known as being infected.

What kinds of infections are caused by GAS?

Most GAS infections are relatively mild illnesses such as sore throat, impetigo (a crusted skin infection usually around the mouth that often affects children) or cellulitis (an infection causing redness of the skin). Most cases of throat infection will pass without the need for treatment and skin infections may require a short course of antibiotics.

On rare occasions, GAS can cause severe diseases called invasive GAS disease.

Who is at risk of GAS infections?

Anyone can become infected GAS. However, people with long-term illnesses like cancer, diabetes and kidney disease, and those who use medications such as steroids, are at higher risk for invasive disease. Breaks in the skin, such as surgical wounds, or cuts can also provide an opportunity for the bacteria to enter the body and cause infection.

What is *invasive* GAS disease?

Invasive GAS disease occurs when the bacterium gets into parts of the body where it is not usually found, such as the blood, muscle, or lungs. Two of the most severe, but rare, forms of invasive GAS disease are necrotising fasciitis (a deep tissue infection with tissue destruction requiring surgery) and Streptococcal Toxic Shock Syndrome (an illness with some of the following: high fever, low blood pressure, muddled thinking, body rash as in scarlet fever, diarrhoea and vomiting, difficulty breathing, kidney or liver damage and blood clotting problems).

Why does *invasive* GAS disease occur?

Invasive GAS infection occurs when the bacterium gets past the body's natural defences. This may occur when sores or other breaks in the skin allow the GAS bacteria to get into the bloodstream and deep tissue, or when the person's ability to fight off infection is decreased because of long-term illness or an illness that affects the immune system. Some types (called 'strains') of GAS are more easily able to cause severe disease than others.

I have been told I have GAS disease – what will happen to me now and how will it be treated?

Depending on where the GAS infection has been identified and how severe the symptoms are, you will be given various antibiotics to treat the infection. Very occasionally, immunoglobulin (antibodies that will help you fight the infection, obtained from blood donors) is given as well.

While you have this infection you are likely to be kept in a single room – not in a bay with other patients. This is to help prevent the infection spreading to others and may only be for a few days. However if the infection is quite severe then you may need to remain in a single room for a longer period of time.

The hospital workers caring for you may sometimes wear disposable gloves, aprons and very occasionally a mask when in contact with you. The protective clothing they wear will depend on which part of your body has the infection and also what they are actually doing with you during that time.

To help prevent GAS infection spreading to others it is important you wash your hands with soap and water or use the alcohol hand rub often. If you have a throat infection it is important that you cough/.sneeze into disposable tissues, throw these away promptly and then wash your hands or use the alcohol hand rub.

Are my relatives, visitors, household contacts at risk of getting GAS disease from me?

Most people in close contact with GAS remain well and symptom free, although some develop a sore throat or mild skin infections. Although healthy people can get invasive GAS disease from a relative or a member of their household with GAS, it is very rare.

If your visitors are helping with your care activities then they may also need to wear disposable aprons or gloves, so they should check with the nurses if this is necessary. It is very important that visitors and carers wash their hands or use the alcohol hand rub often and especially when leaving your room. Other important times for them to wash their hands or use the hand rub are: before eating, after going to the toilet and before and after helping you with personal care activities such as washing, dressing, eating or using the toilet.

How would they know if they have developed the infection?

The most important thing to be aware of are the early signs and symptoms of invasive GAS disease, which are:

- High fever
- Severe muscle aches
- Pain in one area of the body
- Redness at the site of a wound
- Vomiting or diarrhoea

What should they do if they develop any of these symptoms?

Contact their GP or seek medical advice immediately. Tell the GP they have been in contact with someone recently diagnosed with invasive GAS disease and now have developed some symptoms that are causing concern. It is likely that the GP will want to see them in the surgery. If they are too unwell to visit the surgery or it is closed they should not delay seeking medical advice.

Remember, most people who come into contact with GAS remain well and symptom free, or may develop mild throat or skin infections.

Contracting invasive GAS disease from a relative or household member is very rare.

If you have any further questions speak to the ward staff or ask them to contact the Hospital Infection control Team.

You can also obtain useful information from the following websites that also provide links to patient support groups.

Public Health England

<https://www.gov.uk/government/organisations/public-health-england>

NHS Choice

<http://www.nhs.uk/conditions/streptococcal-infections/pages/introduction.aspx>

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: (01323) 417400 Ext: 5860 or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 01424 755255 Ext: 2620

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:

Dr Anne Wilson, Consultant Medical Microbiologist & Director of Infection Prevention & Control

The directorate group that have agreed this patient information leaflet:

Trust Infection Prevention & Control Group

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