What is Group A Streptococcal infection?
Group A streptococci (GAS) are a type of bacteria. Many people carry these bacteria harmlessly in their throat or on their skin, and have no symptoms of illness; this is known as being “colonised”. At any one time, up to 1 in 5 people can be colonised with GAS. Infection occurs when people with GAS develop symptoms. GAS infection is contagious.

What are the symptoms of GAS infection?
The most common symptoms of GAS infection are:
• A mild sore throat or
• A skin infection called impetigo
• There may also be flu-like symptoms and muscle tenderness.

What is invasive Group A Streptococcal infection?
In rare cases, GAS can also cause more serious or “invasive” infection (iGAS). Where iGAS infection occurs, the bacteria may produce toxins and may cause a number of severe and sometimes fatal conditions such as:
• An infection of the bloodstream (bacteraemia)
• Severe infection which spreads to areas of soft tissue below the skin (necrotising fasciitis). This is rare.
• Streptococcal toxic shock syndrome. This is rare but can cause rapidly progressive symptoms of faintness, vomiting, diarrhoea, high fever, rash and confusion.

Complications of iGAS can include:
• Acute rheumatic fever (a disease of the heart)
• Glomerulonephritis (kidney disease).

It is important to realise that although these conditions are serious, they do not occur as commonly as a sore throat or skin infection.

What are the symptoms of iGAS infection?
Early signs and symptoms of iGAS infection include:
• High fever
• Severe muscle aches
• Localised muscle tenderness
• Redness at the site of a wound
Group A Streptococcal Infection

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How do you catch GAS?
GAS bacteria is produced in the nose and throat of infected people and spreads between people during sneezing, kissing and touching. The bacteria are more likely to enter the body and cause invasive infection through broken skin. A person may become infected from either their own skin lesions or from contact with an infected person.

GAS infection has occasionally resulted from consuming unpasteurised milk or milk products.

Who is most at risk?
People with lower immunity are more likely to become ill. Those most at risk include:
- Very young or elderly people
- People with chronic illnesses such as heart disease, diabetes, HIV infection or cancer
- Those who have recently been infected with chicken pox
- Those undergoing high dose steroid therapy
- Injecting drug users.

How is GAS diagnosed?
The wide range of possible symptoms makes it difficult for doctors to diagnose GAS infection early. If you are suspected to have GAS infection you may have blood samples or nose or throat swabs taken and tested.

If you are diagnosed with GAS infection it is sometimes necessary to check relatives or other people in contact with you to see if they are carrying the same strain of GAS. This is normally done by taking nose and throat swabs.

What is the treatment for GAS?
Most people who are colonised with GAS never receive treatment for it. This is because the GAS bacteria can quite happily live on our skins or in our mouths without causing any problems.

GAS infection is usually successfully treated with the antibiotic penicillin. If you are allergic to penicillin, you must inform your GP or doctor as soon as possible so that a safe alternative antibiotic can be prescribed. It is very important to complete the full course of antibiotics as prescribed.
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Close contacts of a person with GAS infection will also be given antibiotics if they have symptoms suggesting that they are also infected. If a mother or baby in the neonatal period (first 28 days of life) develops iGAS, both will be given antibiotics.

Antibiotics may also be given as a control measure in outbreaks. This is to prevent spread of infection.

What are the benefits of treatment?
Successful treatment usually means that an infected person recovers without any major complications.

Are there any risks to the treatment?
Common side effects of antibiotics include nausea, vomiting and diarrhoea. If you suffer any of these side effects, do not stop taking the antibiotics but see your GP or doctor as soon as possible as they may change your treatment or give you something to cope with the nausea.

What are the risks of not getting treatment?
If you do not take your antibiotics or complete the full course given, your infection may become worse and in severe cases may be fatal.

Are there any alternatives?
If infection is severe, antibiotics may be given by injection. In cases of necrotising fasciitis, the affected tissue needs to be removed surgically.

How long am I infectious for?
If left untreated, people with GAS infection are usually infectious for 2-3 weeks after developing a sore throat. If treated with antibiotics, people with GAS infection stop being infectious 24 hours after treatment is started.

Should I stay away from work/school?
GAS infection is contagious. You should avoid exposing other people by staying away from work until 24 hours after you begin treatment and until you are well enough to go back. Children who have GAS infection should not go to school or day care during this period.

How the spread of GAS be prevented?
- Wash your hands thoroughly with hot soapy water after contact with a person who has been diagnosed with GAS infection and ensure you dry them thoroughly.
- If you have a GAS infection you should wash your hands after coughing or sneezing. If you have any lesions on your hands (e.g. cuts and grazes), keep them covered until they have healed.
If you have a GAS infection, try and stay away from people with a weakened immune system until you have had 24 hours of antibiotics.
• Avoid consuming unpasteurised milk.

Who might contact me if I am infected?
An Infection Prevention and Control Consultant or Nurse may contact you to try to identify the source of infection and help you prevent further spread of infection.

Contact details
If you have any questions or concerns please speak to the doctor looking after you, your GP or the hospital.

Hospital Infection Prevention and Control Service
Tel: 0121 554 3801 (ask for Infection Prevention and Control Service)

Further information
For more information about our hospitals and services please see our websites www.swbh.nhs.uk and www.swbhengage.com, follow us on Twitter @SWBHnhs and like us on Facebook www.facebook.com/SWBHnhs.

Sources used for the information in this leaflet
• Health Protection Agency: ‘Invasive Group A Streptococcal Infection’ 2009
• National Institute for Health and Care Excellence, ‘Standard principles for preventing hospital acquired infections’, 2001

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5495 or email: swb-tr.swbh-gm-patient-information@nhs.net