Septic Arthritis

Information for parents and caregivers

Welcome to the Southern Adelaide local Health Network. This information sheet aims to answer any questions you may have about your child having septic arthritis.

What is Septic Arthritis?

Septic arthritis is an infection in a joint (e.g. hip, knee, shoulder) commonly caused by bacteria entering the bloodstream and travelling into the joint. In rare cases it can be caused by a fungus. Sometimes the cause is unknown but it can occur after an infection around the bone or sometimes from an injury where the skin is broken and bacteria have entered the body. The infection can cause a collection of pus in the joint and cause pain and swelling. It can occur at any age but is more common in babies, toddlers and young children. It is important to treat septic arthritis early to manage the infection and help prevent long-term problems.

Signs and Symptoms:

Symptoms usually start suddenly and can include:

- Fever greater than 38.5°C
- Hot, swollen or reddened area near a joint
- Painful limb or tender near a joint
- Difficulty moving the joint
- Difficulty crawling or walking (e.g. limping)
- In newborns and young babies, the only obvious symptoms of septic arthritis may be irritability or fever. Commonly the hip is affected, and your baby may have swelling in the buttock or thigh, an inability to move the hip (especially during nappy changes) and they may hold their leg in an unusual posture.
- Septic arthritis usually affects only one joint, but sometimes it affects more than one joint.

When to see a doctor

If you think your child has septic arthritis, you should take your child to your general practitioner or the nearest Emergency Department. The doctor will make a diagnosis by examining and assessing the joint and asking questions about your child's symptoms and history (i.e. recent injury to the area, if they have had other infections)

Is there a test for septic arthritis?

Yes. Tests for septic arthritis include:

- Lab tests on a sample of fluid from the joint. Usually, the doctor can use a needle and syringe to get a sample of fluid. But sometimes the doctor has to do surgery to get a sample of fluid. The fluid sample is sent to a laboratory for tests.
- Blood tests, called "blood cultures," to check for bacteria in the blood. The blood results do take 24-48 hrs to get a result.
- Imaging of the joint such as X-ray, ultrasound or MRI

If your child has recently had an injury and they are showing signs of septic arthritis in the injured area, return to your treating hospital.

Treatment

- Your child may need to be admitted to hospital for treatment, including antibiotics given directly into a vein through a drip (intra-venous or IV therapy).
- Pain relief medication will be given.
- Your child will usually need to have a surgical procedure where the joint is washed out, to clean the infection out of the joint. This is performed under a general anaesthetic (while your child is asleep), and it may need to be done more than once.
- Your child will need regular blood tests to check their progress and recovery from the infection while in hospital. Their temperature and other vital signs will also be checked frequently.
- The IV antibiotic treatment will continue until your child shows signs of improvement, through their blood tests and temperature checks. In some cases, long-term IV antibiotics can be given after your child has gone home from hospital, with nurses visiting you at home to help.
- The length of time your child will need to take antibiotics will vary. It will vary due to the organism involved and your child's response to the treatment.

Each child recovers at a different speed. It is difficult to know how long they will need to stay in hospital, but most children will be able to go home once their temperature has been normal for 24 hours.

Care at home

- It is very important to make sure your child takes every dose of their antibiotics and finishes the course. This will ensure they recover from the infection, and prevent the infection from coming back.
- Keep an eye out for an increase in your child's temperature or any of the other signs and symptoms listed above.

If any of these symptoms worsen or if new symptoms develop, go to the hospital emergency department or contact your treating doctor.

Follow-up

- Your child will have a follow-up appointment after they leave hospital. It is important to keep this appointment, even if your child seems well.
- Regular follow-up will be arranged to ensure that there has not been any damage to the joint.
- Blood tests may also be arranged, which are normally performed prior to your child's appointment, so the doctor has the results to discuss with you at the appointment

Key points to remember

- Septic arthritis is a bacterial infection in a joint, which causes swelling and pain.
- The symptoms may vary greatly. If your child has a rapid onset of fever, with a reluctance or inability to use a limb, take them to your local doctor or a hospital emergency department.
- Treatment often involves a stay in hospital where intravenous (IV) antibiotics are given.
- Regular blood tests are sometimes needed to monitor your child's progress - even after going home.
- It is essential your child takes the entire course of all antibiotics after going home. This is usually for three to six weeks.

Common questions our doctors are asked

Will my child's joint recover completely? Will they be at risk of arthritis in that joint when they are older?

If treated early, almost all cases of septic arthritis do not result in long-term damage to the joint or surrounding bones. It is therefore important that the condition is diagnosed quickly and treated accordingly.

Why do I need to complete the antibiotics if my child's infection is all better?

Not completing a full course of antibiotics may lead to the bacteria becoming resistant to the antibiotic that was prescribed to treat your child. This means that stronger antibiotics may be required, and contributes to worldwide antibiotic resistance. It is important to ensure that all of the bacteria have been killed off, which is why the course continues for many days after your child looks and feels better.

For further Information

See your family doctor

For 24 hour health advice - call health direct Australia 1800 022 222

Parent helpline 1300 364 100

Local emergency department

Adapted from

RCHmelbourne: fact sheet: septic arthritis 2018

Upto Date (may 2020) Bacterial arthritis : clinical features & diagnosis in infants & children Up to date (may2020) patient education: septic Arthritis (the basics) Septic arthritis in children: womens And childrens fact sheet

For more information

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