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Shortened antibiotic use for successfully drained septic arthritis



For septic arthritis in the hand or wrist that has been drained, 2 weeks of antibiotics works as well as 4 weeks.

INTRODUCTION

Septic arthritis is a bacterial infection in a joint. It may develop quickly, and causes inflammation, swelling and pain. Septic arthritis affects both adults and children. These kinds of infections can affect any joint, and the cause can vary. Sometimes septic arthritis is spontaneous and happens for no reason. In other people it may be caused by an injury. Spontaneous septic arthritis is most common in the hips or knees, while infections caused by injury are common in the hands.

The treatment of septic arthritis usually requires a combination of drainage to mechanically remove the dead tissue and infection from the joint, and then antibiotics to help treat the infection while the wound heals.

WHAT DID THE AUTHORS HOPE TO FIND?

The authors hoped to work out how long people with septic arthritis need to take antibiotics for after they have had a joint drained. This is an important question, because many bacteria are developing resistance to antibiotics, which stops the medicines from working. In addition, taking antibiotics for a long time can cause side effects.

WHO WAS STUDIED?

The study included 154 people being treated at one clinic in Switzerland. Of these, 99 had septic arthritis in their hand or wrist. Everyone was over the age of 18, and all the people taking part had surgical drainage to treat the infection.

HOW WAS THE STUDY CONDUCTED?

This was a prospective randomised trial. This means that people were assigned by chance to one of two treatment groups to receive antibiotics for either 2 or 4 weeks after their surgery. Using chance in this way means that the groups will be similar and will allow the variable or treatment under investigation to be compared objectively. During the treatment both patients and their doctors knew which group they were in. Because it was only the duration of treatment that was being investigated, the treating doctor was able to choose which antibiotic they wanted to use for each person.

WHAT WERE THE MAIN FINDINGS OF THE STUDY?

The study found that people taking antibiotics for 2 weeks did just as well as those taking them for 4 weeks.

ARE THESE FINDINGS NEW?

Although some studies have already looked at this topic in children with septic arthritis, the authors think that this is the first prospective randomised trial looking at the duration of antibiotic therapy after surgical drainage in adults. This is also the first time a course as short as 2 weeks has been trialled.

WHAT ARE THE LIMITATIONS OF THE STUDY?

The study was quite small, and looked mostly at septic arthritis in the hand and wrist. This means the results cannot be formally extended to infections in other joints such as the hips or knees, or infections from other specific causes. Also, because this study was in otherwise healthy people over the age of 18, it is not possible to say whether antibiotic use could be shortened in children with septic arthritis, or in transplant patients and immune-suppressed older patients.

WHAT DO THE AUTHORS PLAN ON DOING WITH THIS INFORMATION?

The authors have already changed how they prescribe antibiotics to their own patients with septic arthritis. They are also planning some follow-up studies.

WHAT DOES THIS MEAN FOR ME?

If you have septic arthritis which has been successfully drained, at least in your hand or wrist, the period for which you need to take antibiotics afterwards might be reduced to 2 weeks. However, you should always follow the instructions on your prescription. If you have any questions about your treatment, speak to your doctor.

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