



If you do not expect the unexpected, you will not find it.
~Heraclitus

CHAP Weekly Update

October 16, 2020

Septic Arthritis – Recognizing and Caring for Patients

What is Septic Arthritis?

Septic Arthritis is a pus-producing infection in a joint.

Septic = Infection/ pus-producing

Arthritis = Inflammation or trouble in a joint



What Causes Septic Arthritis?

Although viruses and fungi can cause infection, the most common cause is bacteria.

H flu A: This bacteria is a common cause of septic arthritis in Alaska and Canada, but less common in the rest of the world. This is different from H flu B, for which we routinely immunize.

Strep pneumonia: Some types are covered by Prevnar immunization.

Staph: Both MRSA (methicillin resistant Staph Aureus) and MSSA (methicillin sensitive)

Other types of bacteria may be seen but are less common.

How do the Bacteria Get Into the Joint?

- ❖ **Spread through blood** - An infection in the body travels through the blood to the joint
- ❖ **Spread from a severe cellulitis located close to the joint**
- ❖ **Trauma** - An open joint fracture or from something stabbed into the joint during trauma

Why is this a Problem?

Joint spaces are small, with just enough room and fluid for the joint to move smoothly. If there is infection and pus in that tiny space, it is very painful and can cause permanent damage.

Who Gets It and Why?



Children less than 5 years old are more likely to get septic arthritis than older children and adults.

Children have rapidly growing bones and this rapid growth means there are lots of little blood vessels bringing oxygen and nutrition to the area. The line of bone growth is very close to the end of the bone and the joint space. Bacteria spreading through the blood can leak out into the joint and cause an infection.

How to Recognize Septic Arthritis

Symptom:

If a child has a fever and won't use an arm or leg, there is a 40% chance they have septic arthritis.

Other symptoms:

- Red hot swollen or tender joint
- Child may hide arm or leg to keep it from being examined
- Pain is constant and may wake up child at night



Most common joints:

Knee and hip



Thanks to Dr. Benjamin Katz for his presentation on *Septic Arthritis: An emergency you do not want to miss!*

Let us know what you think! aka-CHAPCOVID-19weeklyupdates@anthc.org
Send questions for presenters and each other, and suggest topics for discussion.



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM

Alaska total cases:	10,323
US total cases:	8 Million
World total cases:	217,000 Deaths 38.7 Million 1.09 Million Deaths



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Tips for Recognizing Septic Arthritis

- Don't assume that the pain is from a common injury! If there is a fever and change in how a child is using a joint, **report Now**.

Exam Tips:

- Observe: Does the child move all 4 extremities equally? Is the child limping? Does the child look sick?
- Start on the side that is *not* hurting, then compare to the other side.
- Remember to look at the joint above and below the painful joint.
- Hips: If the hip is infected, children will lie with the leg rotated out and to the side.



Share With Your Referral Doctor...

- Any signs of sepsis: High fever, high heart rate for age, high respiratory rate for age. Use your CHAM for normal values for age.
- Any signs of septic shock: Sepsis, low blood pressure, mental status changes.
- Any other medical problems that might make treatment tricky.

Treatment to Cure Infection



Antibiotics - If child is very sick (signs of sepsis), you may need to start antibiotics before transport.

Clean out the joint - This is done in surgery, usually in Anchorage. It may need to be done multiple times.

Treatment you may need to start in the village:

- Watch ABCs and pulse oximetry
- IV fluids if child is dehydrated or showing signs of shock
- Glucose if blood glucose is low
- Antibiotics as ordered by doctor

Follow up After Stay in Hospital

- May need antibiotics for 3-6 weeks
- May need physical therapy to get back mobility and function
- May need to be seen by orthopedics to ensure bones are growing normally

Remember: Infection in a joint can cause permanent damage. Waiting more than 4 days after symptoms have started increases the likelihood of damage. *Any fever and change in the way a child uses a joint should be reported quickly.*

COVID-19 Vaccine Update

The planning team for vaccine delivery is holding meetings with regional health care leaders from around the state. They are discussing:

- How to distribute the vaccine with several storage requirements: cold, very cold, and ultra cold
- How to identify who needs to be prioritized to receive early vaccine

No vaccine has been approved yet. Several trials have been paused to investigate side effects. This is normal. The process of pausing to evaluate side effects is part of the safety protocol for all vaccine development.

- Alaska Department of Health and Social Services COVID-19 Vaccine Information:
 - [COVID-19 Vaccine information for the general public](#)
 - [COVID-19 Vaccine information for healthcare workers](#)
- From the CDC: www.cdc.gov/coronavirus/2019-ncov/vaccines/safety.html

Save the Date



Next session: October 20, 2020

Bethany Berry, CNM will talk about: Medication assisted pregnancy.



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