



Acute Chest Syndrome (ACS) Sickle Cell

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What is Acute Chest Syndrome?

- Acute Chest Syndrome (ACS) is a sickle cell crisis in the lungs.
- Normally, blood travels through vessels to the lungs to pick up oxygen and then delivers it to the rest of the body. In ACS, blood is sickling in the lungs, so it can't pick up as much oxygen as usual.

What are the causes of Acute Chest Syndrome?

Acute chest is more likely to occur after

- 1) Infections
- 2) Pain crises
 - a. It is important to make sure your child is moving around even though they are in pain
 - b. During admission, it is important to do your breathing exercises with incentive spirometry
- 3) Sedation for procedures.
 - a. Sedation can put your child at a higher risk for developing ACS
 - b. Please let your medical team know about any upcoming surgeries or sedation.
 - c. In many cases, we can give a blood transfusion before surgery to help decrease the risk of ACS.

What are the signs of ACS?

- Fever over 101
- Chest pain, cough, wheezing, shortness of breath

What should I do if I think my child is developing ACS?

Take your child to the ED immediately. If he/she is having trouble breathing, call an ambulance (911) to transport him/her to the nearest hospital.

How will the doctors know if my child has ACS?

- Once at the hospital, let the doctors know your child has sickle cell and trouble breathing, chest pain, shortness of breath, or wheezing. If your child has fever and the chest x-ray shows that blood is sickling in the lungs, the doctors will diagnosis him/her with ACS.
- Some children develop ACS while admitted for another sickle cell complication. If you feel that your child's breathing is worse while at the hospital, please tell the doctor immediately.

How will my child's ACS be treated?

- Your child will get IV antibiotics and likely receive a blood transfusion to treat ACS.
- Your child may also need oxygen to help breathe until the lungs heal completely.
- Acute chest syndrome may take several days to a week to get better

How can I help prevent my child from getting ACS?

- Your child should receive all recommended vaccines, including pneumovax and a yearly flu vaccine.
- Hydroxyurea decreases the risk of getting ACS
- If your child has a severe episode of ACS, your doctors may want your child to receive blood transfusions for several months until the body heals.