

Acute Chest Syndrome in Sickle Cell Disease: Information for parent / carer

Sickle Cell Disease is an inherited blood condition which can affect various parts of the body. This leaflet provides information about a serious complication of Sickle Cell Disease (SCD) called **Acute Chest Syndrome (ACS)**.

What is ACS?

Although the reasons are not clearly understood, it is believed that "sickled cells" clump together in the small blood vessels either in the lungs or moves there from somewhere else in the body. Sometimes this is triggered by a lung infection like pneumonia.

ACS can also develop before, during or after an episode of pain in the abdomen or bones. This may be because of shallow breathing due to pain or large doses of strong pain killers. It can also develop after a general anaesthetic.

Acute chest syndrome is a common cause of hospitalisation in children.

What are the symptoms of ACS?

Symptoms of ACS can be similar to pneumonia That is why your child may be treated like he/she has both. Symptoms include:

- **Chest, rib and/or back pain**
- **Fever – temperature greater than 38 degrees**
- **Changes to breathing - fast breathing/difficulty breathing/shallow breathing**
- **Pallor to skin and/or blue colour to lips or fingers**
- **Cough or wheeze**

If your child develops these symptoms you should attend your local centre or go to A&E as soon as possible. If transport is difficult do not delay and call an ambulance by dialling **999**.

How will my child be treated for ACS?

On arrival at hospital your child will be assessed as follows

- Observations of blood pressure, pulse rate, temperature, breathing rate and oxygen levels.
- Assessment of pain
- An examination by doctor, and medical history taken
- Blood tests and swabs from throat and nose
- A Chest x-ray will be performed

Immediate treatment which may be given can include

- Intra venous fluids, pain relief, oxygen and intravenous antibiotics
- Inhaled medication (nebuliser)
- A blood transfusion or exchange transfusion may be required.

Your child will be closely monitored until there is improvement.

What other treatment will my child have?

Your child will also be seen by a Physiotherapist. He/she may give advice on deep breathing exercises. Your child may also be given an incentive spirometer to use which helps with deep breathing. It is important that your child follows the guidance of the physiotherapist as this can help to stop ACS from getting worse and aid their recovery.