



Preventing breathing difficulties during sickle cell crisis

Haematology Physiotherapy Service Produced: Feb 2021

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Why do I need to see a physiotherapist every time I am admitted to hospital?

Because a sickle cell crisis is very painful, you will be less able to get up and walk around and take deep breaths. This means that you are more likely to develop a chest infection, small areas of collapse in the lungs and/or a condition called 'Acute Chest Syndrome', which can develop suddenly during your crisis and become very serious. There is also evidence that repeated episodes of Acute Chest Syndrome can lead to long-term breathing difficulties.

The physiotherapist will come and review you and give you help, advice and treatment focused upon preventing breathing difficulties, including some of the causes of Acute Chest Syndrome. If you have already developed the condition, the physiotherapist may also treat you for this. It is very important that you follow any instructions given, even if you feel your breathing is fine, because problems can develop suddenly and without warning.

What is an incentive spirometer?

As part of your treatment, you may be asked to use an incentive spirometer. This is a device used to help you take slow, deep breaths.

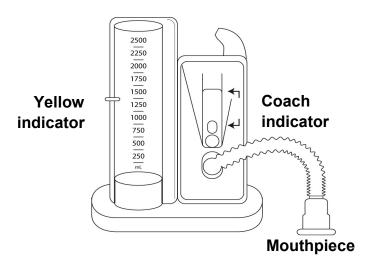
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How to use your incentive spirometer

- 1. Sit on the edge of your bed or sit up as far as you can in bed. This helps make the treatment as effective as possible.
- 2. Hold the Incentive Spirometer in an upright position with both hands, or rest it on a flat surface.
- 3. Place the mouthpiece in your mouth and seal your lips tightly around it.
- 4. **Breathe in slowly** and as deeply as possible, raising the yellow piston towards the top of the column. The yellow coach indicator should be in the 'smiley face' area.
- 5. Hold your breath for about five seconds. Allow the piston to fall to the bottom of the column. Do not breathe out into the spirometer.
- 6. Rest for a few seconds and repeat steps one to five at least ten times every two hours you are awake whilst in crisis.
- 7. After you have completed each set of ten breaths, cough strongly to be sure your lungs are clear.
- 8. If you have pain when you cough, support your abdomen and ribs when coughing by placing a pillow firmly against it.
- 9. As pain allows, you will be encouraged to sit out of bed and to walk around, as this is also a very effective way of making sure you do not develop any breathing problems.
- 10. You will be provided with a new spirometer on each admission.



Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice



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