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Haematology Department

**Sickle Cell Crisis – Blood Transfusion**

Information for parents and carers

**Introduction**

This leaflet aims to provide you with general information about the signs and symptoms your child may have when they are having a sickle cell crisis. If you are ever worried about your child please contact your Sickle Cell Team or take your child to the Accident and Emergency Department.

**What is a blood transfusion?**

A blood transfusion is the procedure of putting red blood cells into the body. The purpose of a blood transfusion is to either improve anaemia or suppress the amount of sickle red blood cells in the circulation.

**Why will my child need a blood transfusion when they are having a crisis?**

****There are certain types of sickle cell crisis that make your child unwell so they will need a blood transfusion to make the better. Crisis such as splenic sequestration, aplastic haemolytic crisis will require a top-up transfusion

Crisis such as: chest syndrome, priapism or stroke will need an exchange transfusion.

Leaflets about the different types of crisis are available.

**What is the difference between a top-up transfusion and an exchange transfusion?**

A top-up transfusion is the procedure by which blood is put into the body by a cannula inserted into a vein.

An exchange transfusion is the procedure of replacing sickle red blood cells with non-sickle red blood cells, this is usually done by a machine. Your child will need to have two large cannula's inserted, one in each arm. Sometimes children's veins are not large enough so they will have to have a special central line inserted into a larger vein, this may require an anaesthetic. The exchange transfusion machine takes blood out of one arm, the red blood cells are removed and then donor red blood cells are given.

**Are there any alternatives to blood transfusions?**

In an emergency situation blood transfusions are the recommended treatment option (Davis et al, 2016) as they are the most effective treatment. If your child requires surgery and needs their haemoglobin increasing then there are medications that can be used. However these medications take time to work so can only be used if your Sickle Cell Team is informed well in advance.

**What should I do if blood transfusions are against my religion?**

If blood transfusions are against your religion then you should advise your Sickle Cell Team, preferably in clinic when your child is well. A care plan will be developed should the need arrive for your child to have a blood transfusion. People with sickle cell disease will require a blood transfusion at some point in their life. If blood transfusions are against your beliefs you should consider what you will do in the situation when it is recommended that your child needs a blood transfusion. We will work with you to ensure your wishes are carried out as much as possible.

**Can I refuse for my child to have a blood transfusion?**

If a blood transfusion is suggested for your child but you do not agree, discussions will take place with 2 Consultants to consider your wishes but if transfusion is needed to help your child in a life threatening situation then you do not have the right to refuse the transfusion at that point.

**Is there anything I can do to reduce the chance of my child needing a blood transfusion?**

Hydroxycarbamide is a medication that is used to try to reduce the amount of sickle cell crisis and long term damage to the body. It also reduces the need for your child to receive blood transfusions. Your doctor may recommend that your child takes hydroxycarbamide to prevent sickle cell complications. Even on this medication your child may still need to receive a blood transfusion at some point.

**Where can I get further information or support?**

There is a Jehovah's Witness Hospital Liaison Nurse who can offer information and advice.

If you have any questions or want any further information please contact your Sickle Cell Team on

0151 252 5070.

**References**

Davis, B., Allard, S., Qureshi, A., Porter et al on behalf of the British Society for Haematology. 20106 Guidelines on red cell transfusion in sickle cell disease Part II: indications for transfusion

***Useful websites***

[www.alderhey.co.uk](http://www.alderhey.co.uk)

[www.sicklecellsociety.co.uk](http://www.sicklecellsociety.co.uk)

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This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child’s treatment.

This information can be made available in other languages and formats if requested.

Alder Hey Children’s NHS Foundation Trust

****Alder Hey

Eaton Road

Liverpool

L12 2AP

Tel: 0151 228 4811

[www.alderhey.nhs.uk](http://www.alderhey.nhs.uk)

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