



**SPAHA**

SCOTTISH PAEDIATRIC AND ADULT HAEMOGLOBINOPATHIES NETWORK

# Scottish Paediatric and Adult Haemoglobinopathies Network Trans Cranial Doppler (TCD) Ultrasound – Information Leaflet

From age 2-3, we offer TCD as a regular screening test in the Haematology Clinic.

By using screening tests such as bloods tests and TCD, we aim to detect and treat any issues early.

## **What is Trans Cranial Doppler (TCD)?**

A Doppler machine uses an ultrasound probe (similar to the ultrasound used during pregnancy), to detect the rate of blood flow in blood vessels. Placing the probe over blood vessels (arteries) in the head and neck allows the speed of blood flow to be measured in some of the arteries supplying the brain.

## **Why test children with Sickle Cell Disease for abnormal blood flow?**

In some children with sickle cell disease (HbSS, HbSC, HbS/ -thalassaemia) abnormally fast blood flow in the arteries of the brain may indicate narrowing. This may reduce the blood flow to part of the brain, and if it is very reduced, it may increase the risk of having a stroke in the future. By doing the TCD test it will help us check that the blood flow is normal. If the blood flow is not normal, we will discuss more detailed tests and treatment options with you.

## **What will happen when my child has TCD screening?**

We will arrange an appointment with you for the test, which is done by the Sonographers in the X-ray Department. The test usually takes about 30minutes, although with younger children it may take longer. The test is painless, but your child needs to be relaxed and still during the test. He or she will be awake and lying on a couch during the test and you will be able to stay with him or her. Please contact us prior to the appointment if your child has been unwell.

## **Where does my child go for the test?**

After booking in at the children's outpatient Haematology Clinic at clinic 4 in the main atrium, you will be directed to the X-ray Department also located on the ground floor (follow the Gruffalo signs from outpatients to X-ray).

## **What happens after the test?**

The results will be reported to the doctors in the Haematology Clinic. If the test is normal, we will simply plan to repeat the test every year or so. If the results show fast blood flow, indicating possible blood vessel narrowing, or do not give clear results, we will probably arrange another TCD test within a few weeks. We may also arrange other tests as well. We will talk to you and explain what the results mean and what treatment options are available.

## **Are there any risks?**

There are no known risks associated with the TCD test.

## **Are there any alternatives?**

The TCD test provides unique information about the flow of blood in the arteries supplying blood to the brain, however if required, other investigations include magnetic resonance imaging and angiography (MRI and MRA)

## **If I have any other questions, who should I contact?**

The Haematology Team in Glasgow are always available to answer your questions. You can contact them via:

Clinical Nurse Specialist - 0141 452 4474

Schiehallion Day Care Unit - 0141 452 4475/6

Haematology Secretary - 0141 452 6505

## **Traveling expenses**

You may be eligible to claim travelling expenses when escorting your child to their TCD appointment. You can claim if you are in receipt of some benefits or if you are on a low income. You will be required to provide evidence of this. Please contact the Cashier Office/General Office which can be found on the ground floor of the QEUH. If you required further information, please discuss with your specialist nurse.

## **Queries and concerns**

The Health Rights Information Scotland is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. Their contact information is:

Health Rights Information Scotland  
NHS 24  
Golden Jubilee National Hospital  
Beardmore Street  
Clydebank  
G81 4HX

Helpline: 0800 22 44 88

Email: [nhs.inform@nhs24.scot.nhs.uk](mailto:nhs.inform@nhs24.scot.nhs.uk)

## **Further Information**

Scottish Paediatric and Adult Haemoglobinopathies Network (SPAH) through the website: [spah.scot.nhs.uk](http://spah.scot.nhs.uk)

If you require an alternative format, please contact [nss.equalitydiversity@nhs.scot](mailto:nss.equalitydiversity@nhs.scot), telephone: 0131 275 600

British Sign Language, please contact Scotland BSL: [Contact Scotland \(contactscotland-bsl.org\)](http://ContactScotland(contactscotland-bsl.org))