WHAT IS SICKLE CELL DISEASE?

Sickle cell disease (SCD) refers to a group of genetic conditions in which the sickle cell trait is inherited from both parents.

Key characteristic of SCD is the malformation of red blood cells to a ‘sickled’ shaped cells rather than normal circular red blood cells. This has a detrimental effect on the body’s ability to carry oxygen around the body to vital organs as well as blood flow due to their 'sticky and hard' nature. Consequently, SCD complications include anaemia, pain crises, acute chest syndrome and varied organ damage.

WHAT IS A STROKE?

A stroke occurs when blood cannot reach your brain due to a blockage or ruptured artery. When this occurs, brain cells die due to a lack of oxygen and nutrients.

The two types of stroke include haemorrhagic stroke, from ruptured blood vessels and ischaemic stroke from blockages. Both can be devastating and potentially fatal.

A community of patients, carers and healthcare professionals advocating for the rights of people living with Sickle Cell Disease within Australia

Sponsored by:
Victoria State Government
Department of Premier and Cabinet

All brochures created by ASCA are reviewed by adult and paediatric haematologist.

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Image credit: sicklecellanemianews.com

Australian Sickle Cell Advocacy

Sickle Cell Disease and Ischaemic Stroke

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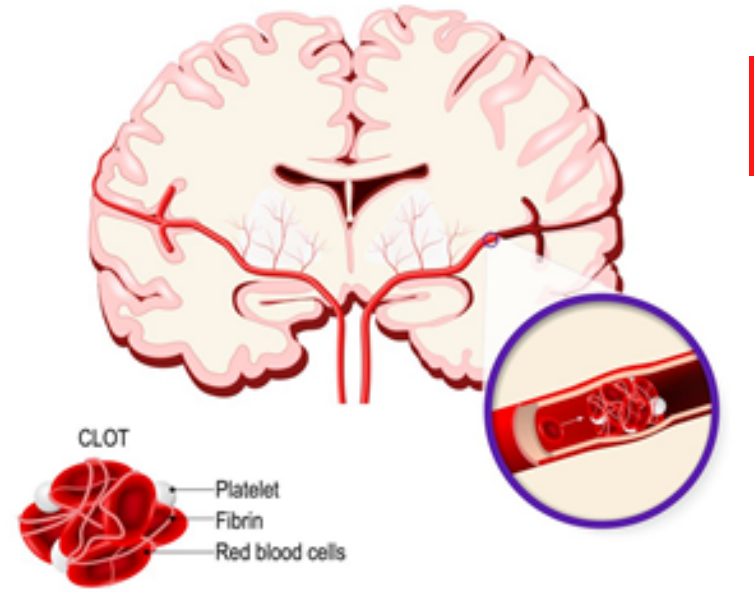

STROKE INCIDENCE IN SICKLE CELL PATIENTS

Stroke can occur in people of all ages, although the occurence is higher in men and older individuals. Sickle Cell patients however fall into a unique risk category, with the Sickle Cell Trait suspected of being a pertinent risk factor of ischaemic stroke.

The mechanism is still under investigation, however research suggests that the sickled blood cells stick to the walls of key blood vessels and can cause clots which may block the arteries supplying the brain.

Consequences of an ischaemic stroke

Stroke is one of the most devastating complications of Sickle Cell Disease. Sickle Cell Anaemia is the most common cause of stroke in children.

Every stroke is different and each person affected by stroke will experience different challenges and needs.

Strokes typically cause weakness in one side of the body and can impact coordination of movement. It can alter personality and behaviour as well as a whole suite of neurological consequences.

Signs and Symptoms

Face – Has their face or mouth drooped?
Arms – Check if they can lift both arms
Speech – Assess whether their speech is slurred. Can they understand you?
Time – Time is critical.

If you see any of these signs, call 000 straight away.

Waiting for help to arrive?

If the person is conscious, lay them on their side, with their head supported.

If they are unconscious check their breathing and pulse. If they are not breathing begin CPR straight away.

If you are unsure of how to perform CPR, the ambulance call taker will give you instructions and guide you through it.

Prevention and management

Red blood cell transfusions alongside routine screening are the most common preventative measures for stroke in sickle-cell disease. This can however lead to iron overload in chronic disease and further research is required into preventative measures that address the underlying cause of stroke in SCD patients.

Following a stroke, multidisciplinary care is required to support cognitive and physical rehabilitation.

Please always consult your physician before making any changes to your health management.