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# Guideline for management of subconjunctival haemorrhages in non-mobile infants

#### Aim

The aim of this guidance is for professionals to know what actions to take when a subconjunctival haemorrhage (SCH) is seen in the eye of a non-mobile infant.

#### Introduction

A SCH is bleeding in the white of the eye. SCHs can be small or can cover the whole eye. They can occur in one or both eyes. A SCH is caused by rupture of blood vessels on the surface of the eye.

### Causes of subconjunctival haemorrhages

In non-mobile infants, most SCHs occur at or within a few days of birth due to raised pressure in blood vessels of the eye during labour.



SCHs can occur in infants delivered by caesarean section where labour had started. Babies may not open their eyes fully until they are a few days old, and the SCH may not be noticed straight away, especially if it is toward the outside of the eye.

SCHs that arise more than 14 days post-delivery are considered not to be due to birth. In many cases the cause is not known. SCHs can be associated with infections or disorders of blood clotting. They can also be caused by compression of the neck or chest resulting in raised pressure within blood vessels of the eye. SCHs can be caused by direct injury to the eye. In non-mobile infants SCHs severe vomiting/coughing are rare causes of SCHs.

### Abuse as a cause of subconjunctival haemorrhages

There are reports of SCHs occurring in non-mobile infants due to inflicted injury. The mechanisms are probably similar to those above e.g. pressure on neck and/or chest, or direct trauma to the eye. Direct trauma resulting in a SCH might also be expected to cause bruising around the eye, but this bruising could disappear before the SCH resolves.

A review from the Royal College of Ophthalmologists recommends that SCHs 'without a clear causal history, that remain unexplained after the medical differential diagnosis of SCH has been considered, may be a sentinel sign for physical abuse and should prompt a thorough consideration of abusive trauma'.<sup>1</sup>

#### The evidence base on physical abuse in relation to subconjunctival haemorrhages

There is little research evidence to help determine the prevalence, natural history or causes of subconjunctival haemorrhage in infants. Therefore, careful clinical judgement is needed when deciding whether to implement the bruising and injury protocol for subconjunctival haemorrhages. The published research adds weight to the need for SCHs caused at birth to be documented, for a careful history and full inspection of the child's body to be carried out when SCHs are found, and for the <u>HIPS Injuries in non-mobile infants</u> protocol to be followed in infants aged over two weeks where SCHs are large, multiple or bilateral or where there are concerning risk factors.

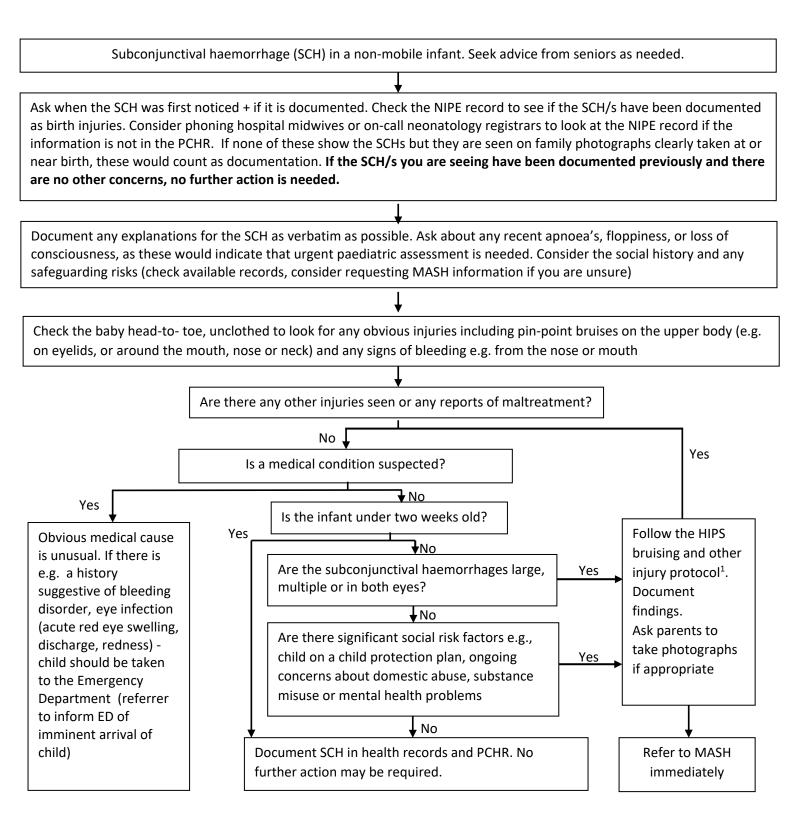
It is important that infants who are abused are recognised and safeguarded which is why it is important to consider whether a SCH in a non-mobile infant may be inflicted.

<sup>&</sup>lt;sup>1</sup> The Royal College of Ophthalmologists. *Clinical guideline: abusive head trauma and the eye in infancy* [online]: RCOphth;2024





## Flowchart for management of subconjunctival haemorrhages (SCH) in non-mobile infants



This guidance should be read in conjunction with the HIPS 'Injuries in non-mobile infants' protocol https://hipsprocedures.org.uk/qkyyoz/children-in-specific-circumstances/bruising-in-infants-who-are-notindependently-mobile