Minor Head Injury in Children - Clinical Assessment Tool

NHS
Hertfordshire and West Essex
Integrated Care Board

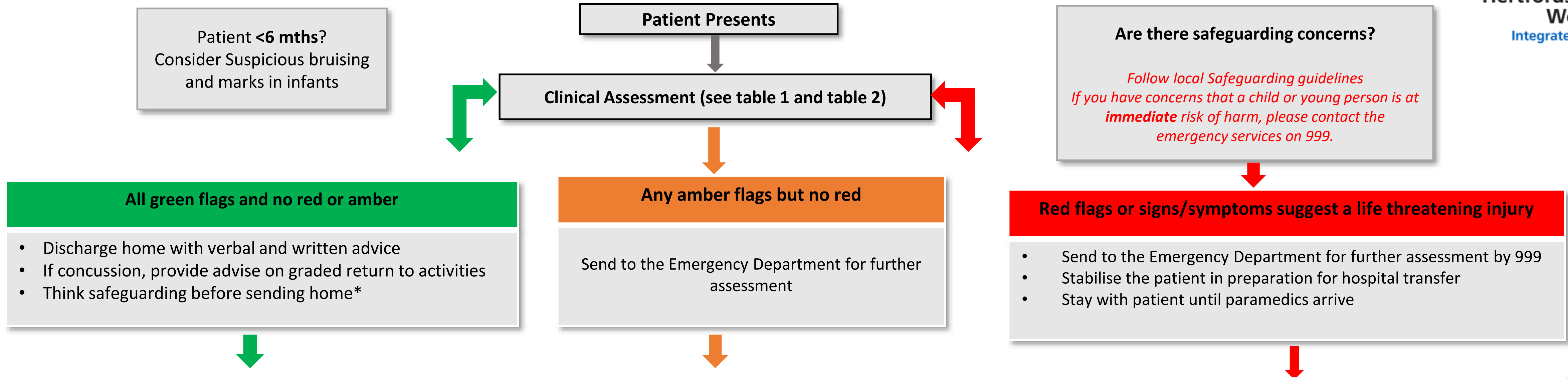

Table 1: Risk Assessment for Head Injury

	Green - Low Risk	Amber- Intermediate Risk	Red- High Risk
Nature of injury and conscious level	• Low risk mechanism of injury • No loss of consciousness • Child cried immediately after injury • Alert, interacting with parent, easily rousable • Behaviour considered normal by parent	• Mechanism of injury: fall from a height > 1m or greater than child's own height • Alert but irritable and/or altered behaviour • Any loss of consciousness because of injury from which person has now recovered	• Mechanism of injury: considered dangerous (high speed road traffic accident; >3m fall) • GCS < 15 / altered level of consciousness • Loss of consciousness lasting > 5mins • Persisting abnormal drowsiness • Post traumatic seizure
Symptoms and Signs	• No more than 2 isolated episodes of vomiting (>10 minutes apart) • Minor bruising or minor cuts to the head	• Any vomiting episodes since the injury (use clinical judgement about the cause of vomiting in children 12 years or under and the need for referral) • Persistent or worsening headache • • Amnesia or repetitive speech • A bruise, swelling or laceration > 5cm if age < 1 year • Continued Professional concern	• Skull fracture – open, closed or depressed • Tense fontanelle • Signs of basal skull fracture (haemotypanum, 'panda' eyes, CSF leakage from ears/ nose; Battle's sign (mastoid ecchymosis) • Focal neurological deficit
Other	*If any safeguarding concerns - refer to child safeguarding team immediately	• Clotting disorder or current anticoagulatant or anitiplatlet therapy (except aspirin monotherapy) • Current drug or alcohol intoxication • Safegaurding concerns/ Nobody available to observe child at home • Additional parent/carer support required • Previous brain surgery or brain injury	Send via ambulance if there is no other way of safely transporting patient

Table 2: Head Injury : Clinical Assessment

History:	Examination:
• When? Mechanism of injury. • Loss of consciousness? Fitting? Vomiting? • Dizziness? • Amnesia? • Worsening headache? • Clotting disorder?	• Assess consious level - GCS (See table below) Confused or repetative? • Skull integrity (bruises; wounds; boggy swelling) + fontanelle assessment • Signs of base of skull fracture • Signs of focal neurology • Cervical spine

Table 3: Modified Glasgow Coma Scale for Infants and Children

	Child	Infant	Score
Eye Opening	Spontaneous To speech To pain only No response	Spontaneous To speech To pain only No response	4 3 2 1
Best Verbal Response	Oriented, appropriate Confused Inappropriate words Incomprehensible sounds No response	Coos and babbles Irritable cries Cries to pain Moans to pain No response	5 4 3 2 1
Best Motor Response **	Obey commands Localises painful stimulus Withdraws in response to pain Flexion in response to pain Extension in response to pain No response	Moves spontaneously and purposefully Withdraws to touch Withdraws to response in pain Abnormal flexion posture to pain Abnormal extension posture to pain No response	6 5 4 3 2 1

*** If patient is intubated, unconscious, or preverbal, the most important part of this scale is motor response. Motor response should be carefully evaluated.*

This document was arrived at after careful consideration of the evidence available including but not exclusively NICE, SIGN, EBM data and NHS evidence, as applicable. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient in consultation with the patient and / or carer.