Healthier Together

Fits, Faints & Funny Turns

Objectives

- To review the features of epileptic and non-epileptic events in children
- To identify important questions to ask in the history
- To decide when a child needs urgent review in hospital

Case 1

- 3 week old baby
- 3 day history of rhymical jerking while asleep
- Seems otherwise well
- No other symptoms

- What other questions do you want to ask?

History, History, History…

- Do the episodes look similar? (stereotyped)
- How often do they happen?
- What time of day?
- Is there an association with sleep?
- Are there any obvious triggers?
- What, exactly, happens?
  - Before, during, after (awareness, eyes, face, limbs)
- Ask for eye witness account AND ask the child
- Try and get video of the event

Case 1

- Events only happen in sleep, after the child has been asleep for 15-20 minutes
- Occurring at least once a day
- No clear triggers
- Described as rhythmical jerking of both hands and sometimes legs, no facial twitching, stops if baby woken up
- Examination – Unremarkable
- Yes, Mum does have a video…

Case 1

Management

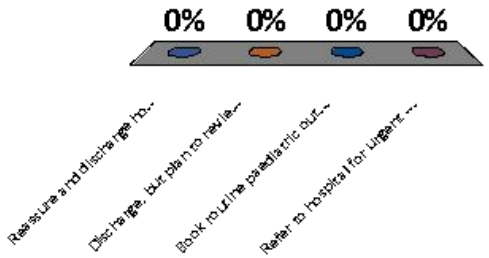
What would you do?

A. Reassure and discharge home with safety netting advice?

B. Discharge, but plan to review again that week?

C. Book routine paediatric outpatient review?

D. Refer to hospital for urgent paediatric review?



Response Counter

Benign Sleep Myoclonus of Infancy

- Completely benign condition in an otherwise healthy child
- No associated abnormal neurology
- Often presents in the first few weeks of life
- Stops if the child is woken
- Only occurs in sleep
- Usually resolves spontaneously in the first 2-6 months of life
- Does not require treatment

Non-Epileptic Episodes - Infants

- Only in sleep – Benign Sleep Myoclonus of Infancy
- During feeds – Sandifer Syndrome/GORD
- Associated with excitement/emotion – Shuddering Attacks, self gratification
- Sudden onset following pain/shock – Rule out cardiac causes

Non-Epileptic Episodes - Infants

Epileptic Clues - Infants

- On waking or going off to sleep
- Repetitive limb jerking/stiffening
- Myoclonic jerking while awake
- Movements associated with changes in GCS

Case 2

- 8 month old boy
- 3 recent episodes of becoming stiff and turning blue
- Starts with a period of crying

- What other questions do you want to ask?

Case 2

- Otherwise fit and well
- Episodes last 1 minute and child is fine afterwards
- No association with sleep/waking
- No rhythmic movement, but sometimes twitchy while upset
- And yes, Mum does have a video…

Case 2

Management

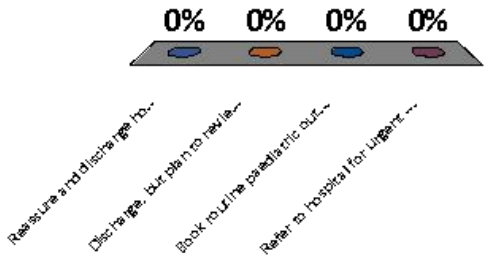
What would you do?

A. Reassure and discharge home with safety netting advice?

B. Discharge, but plan to review again that week?

C. Book routine paediatric outpatient review?

D. Refer to hospital for urgent paediatric review?



Response Counter

Breath-Holding Attacks

- Benign episodes of breath-holding lasting up to 1 minute
- Often triggered by pain/emotion
- Associated with loss of consciousness, cyanosis and stiffening/twitching
- No post-ictal period
- Otherwise neurologically normal children
- No associated morbidity
- Can be more common in children with iron deficiency anaemia

Case 3

- 6 month old boy
- Regular episodes of stiffening arms
- No loss of consciousness, but becomes upset afterwards
- Otherwise well

- What other questions would you like to ask?

Case 3

- Developing normally
- No association with feeds or sleep
- Initially infrequent, but now happening multiple times per day
- And yes, Mum does have a video…

Case 3

Management

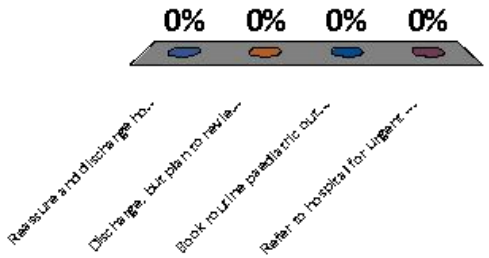
What would you do?

A. Reassure and discharge home with safety netting advice?

B. Discharge, but plan to review again that week?

C. Book routine paediatric outpatient review?

D. Refer to hospital for urgent paediatric review?



Response Counter

Infantile Spasms/West Syndrome

- Epileptic condition with typical EEG changes
- Typically start between 4-12 months of age
- Classic extensor movements of arms with flexion of trunk (Salaam attacks)
- Associated with developmental delay
- Treatment with steroids and Vigabitrin

Non-Epileptic Episodes - Toddlers

- In sleep only – Night Terrors
- During feeds – Sandifers/GORD
- Only with fevers – Febrile convulsions
- Associated with pain/shock – Breath holding, reflex anoxic seizure, exclude cardiac cause

Epileptic Clues - Toddlers

- Episodes around sleep
- Atonic seizures (drop attacks)
- Episodes of intermittent limb weakness –Todd's paralysis
- Vacant episodes –sudden cessation in play/speech, automatisms
- Repetitive limb jerking/stiffening

Case 4

- 5 year old boy
- Wakes in the night screaming and inconsolable
- Does not appear to be aware of surroundings
- Sometimes associated with increased tone in trunk
- Well in the daytime
- No memory of nocturnal events

- Thoughts?

Non-Epileptic Episodes - Children

- Only in sleep –parasomnias, night terrors
- Associated with Fever, intercurrent illness – convulsion/syncope
- Specifically with movement – Dystonia/dyskinesia
- Associated with Pain/Shock – Cardiac, syncope
- Worsened by stress/anxiety – Tic disorder, pseudo-seizure
- Associated with boredom –Daydreaming

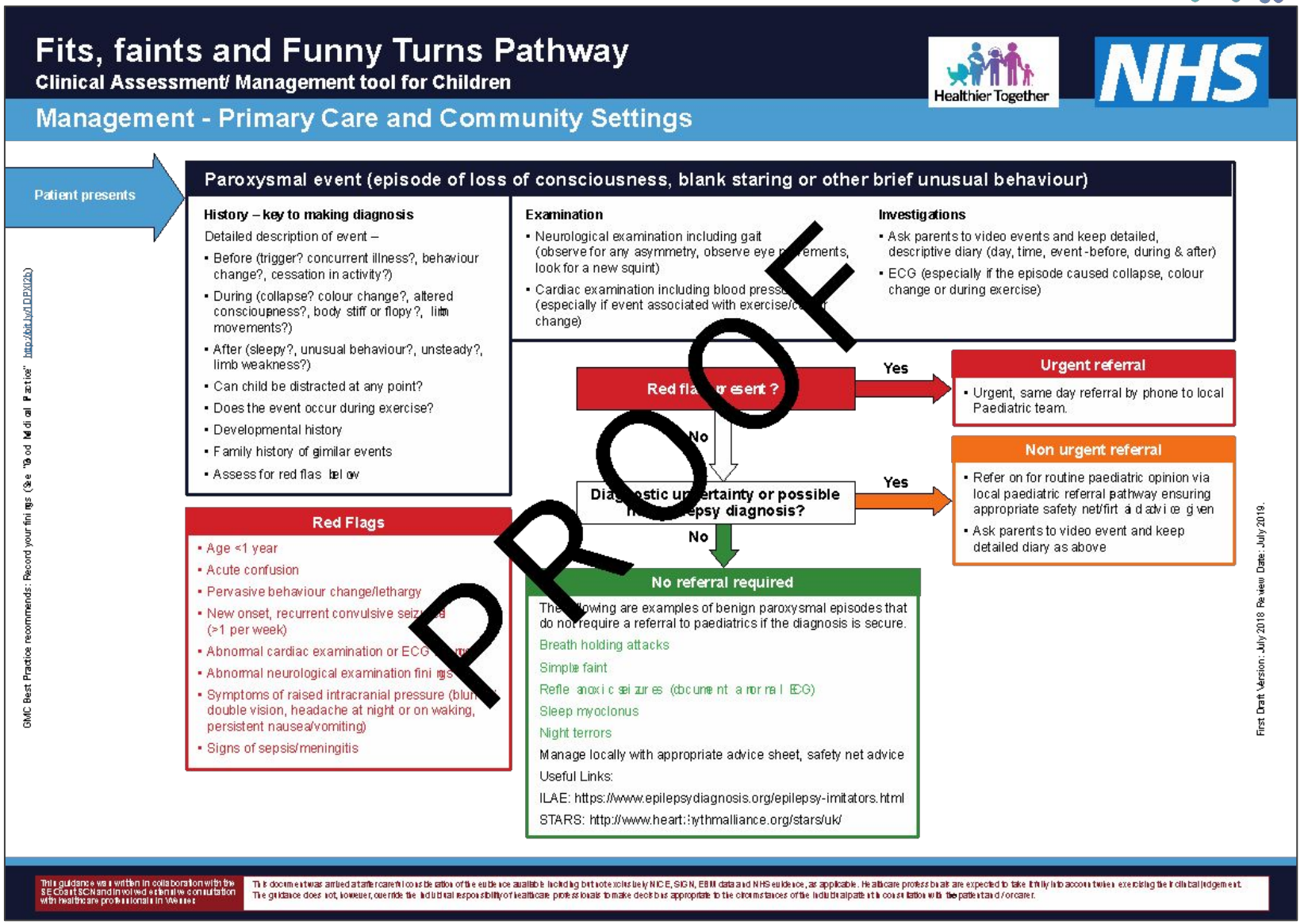
Epileptic Clues - Children

- On Waking (Benign Rolandic Epilepsy)
- Vacant episodes – no distractions, sudden cessation in activity or speech, school work falling behind
- Drop attacks – significant, usually causing injury
- Myoclonic jerks when awake
- Speech regression (Landau-Kleffner syndrome)

Key Points

- History, history, history…
- Video can be very helpful
- Referrals for abnormal neurology in young children is always appropriate
- Red flags
  - Acute confusion
  - Pervasive behaviour change/lethargy
  - New onset, recurrent convulsive seizures (>1 per week)
  - Abnormal cardiac examination or ECG findings
  - Abnormal neurological examination findings
  - Symptoms of raised intracranial pressure (blurred/ double vision, headache at night or on waking, persistent nausea/vomiting)
  - Signs of sepsis/meningitis

Key Points



Fits, faints and Funny Turns Pathway

Clinical Assessment/ Management tool for Children

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NHS

Management - Primary Care and Community Settings

Patient presents

Paroxysmal event (episode of loss of consciousness, blank staring or other brief unusual behaviour)

History – key to making diagnosis

Detailed description of event –

- Before (trigger? concurrent illness?, behaviour change?, cessation in activity?)
- During (collapse? colour change?, altered consciousness?, body stiff or flopy?, limb movements?)
- After (sleepy?, unusual behaviour?, unsteady?, limb weakness?)
- Can child be distracted at any point?
- Does the event occur during exercise?
- Developmental history
- Family history of similar events
- Assess for red flags below

Examination

- Neurological examination including gait (observe for any asymmetry, observe eye movements, look for a new squint)
- Cardiac examination including blood pressure (especially if event associated with exercise/change)

Investigations

- Ask parents to video events and keep detailed, descriptive diary (day, time, event -before, during & after)
- ECG (especially if the episode caused collapse, colour change or during exercise)

Red Flags

- Age <1 year
- Acute confusion
- Pervasive behaviour change/lethargy
- New onset, recurrent convulsive seizures (>1 per week)
- Abnormal cardiac examination or ECG
- Abnormal neurological examination findings
- Symptoms of raised intracranial pressure (blurred double vision, headache at night or on waking, persistent nausea/vomiting)
- Signs of sepsis/meningitis

Red flags present ? — Yes → **Urgent referral**

- Urgent, same day referral by phone to local Paediatric team.

No

Diagnostic uncertainty or possible non-epilepsy diagnosis? — Yes → **Non urgent referral**

- Refer on for routine paediatric opinion via local paediatric referral pathway ensuring appropriate safety net/first aid advice given
- Ask parents to video event and keep detailed diary as above

No

No referral required

The following are examples of benign paroxysmal episodes that do not require a referral to paediatrics if the diagnosis is secure.

Breath holding attacks

Simple faint

Reflex anoxic seizures (document a normal ECG)

Sleep myoclonus

Night terrors

Manage locally with appropriate advice sheet, safety net advice

Useful Links:

ILAE: https://www.epilepsydiagnosis.org/epilepsy-imitators.html

STARS: http://www.heartrhythmalliance.org/stars/uk/

GMC Best Practice recommends: Record your findings (See "Good Medical Practice" http://bit.ly/1DPXi2h)

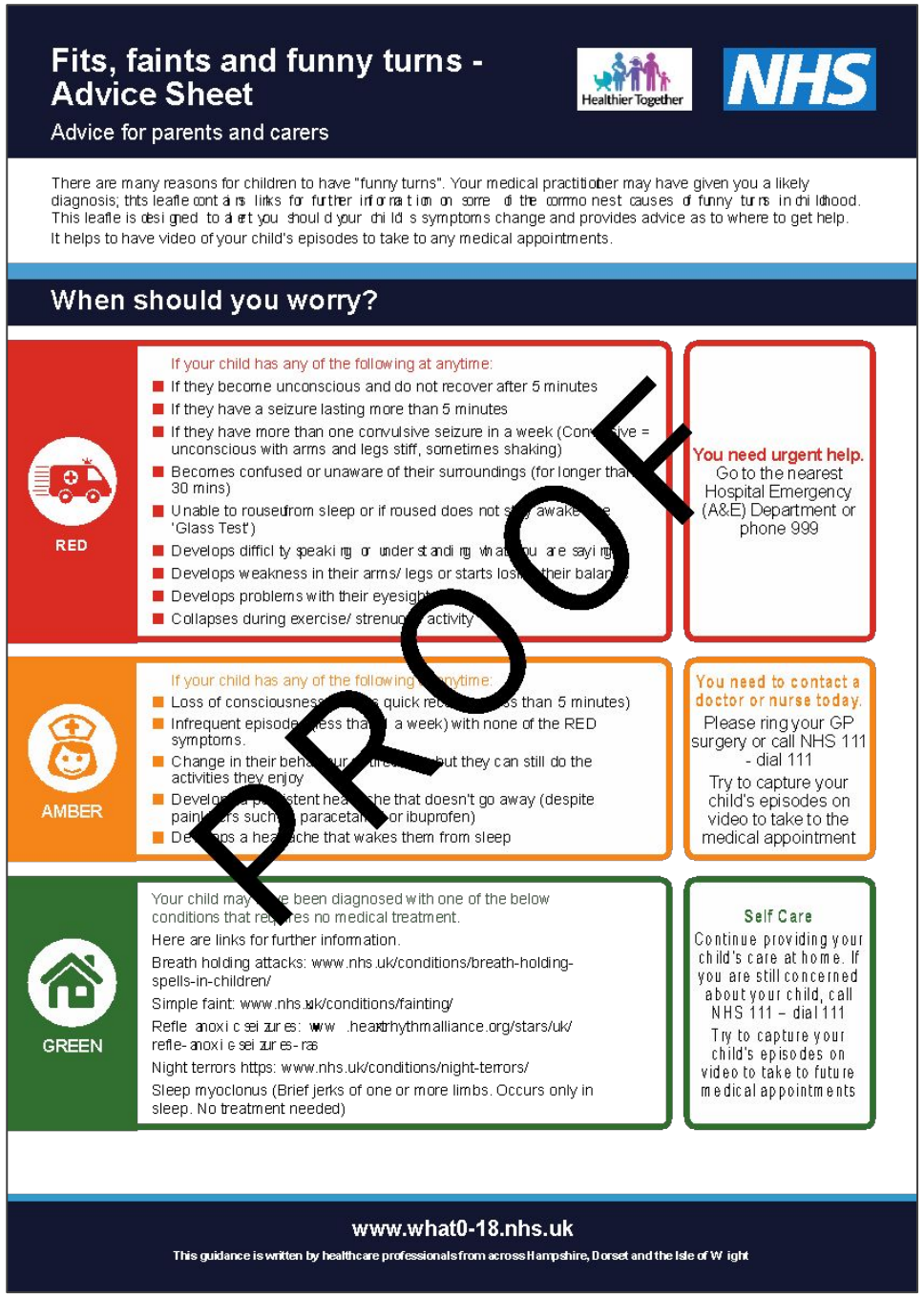
First Draft Version: July 2018 Review Date: July 2019.

PROOF

This guidance was written in collaboration with the SECAmbSCN and involved extensive consultation with healthcare professionals in Wessex

This document was written 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.

Key Points



Fits, faints and funny turns - Advice Sheet

Advice for parents and carers

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NHS

There are many reasons for children to have "funny turns". Your medical practitioner may have given you a likely diagnosis; this leaflet contains links for further information on some of the common causes of funny turns in childhood. This leaflet is designed to alert you should your child's symptoms change and provides advice as to where to get help. It helps to have video of your child's episodes to take to any medical appointments.

When should you worry?

RED

If your child has any of the following at anytime:

- If they become unconscious and do not recover after 5 minutes
- If they have a seizure lasting more than 5 minutes
- If they have more than one convulsive seizure in a week (Convulsive = unconscious with arms and legs stiff, sometimes shaking)
- Becomes confused or unaware of their surroundings (for longer than 30 mins)
- Unable to rouse from sleep or if roused does not stay awake (the 'Glass Test')
- Develops difficulty speaking or understanding what you are saying
- Develops weakness in their arms/ legs or starts losing their balance
- Develops problems with their eyesight
- Collapses during exercise/ strenuous activity

You need urgent help.
Go to the nearest Hospital Emergency (A&E) Department or phone 999

AMBER

If your child has any of the following at anytime:

- Loss of consciousness (quick recovery less than 5 minutes)
- Infrequent episodes (less than a week) with none of the RED symptoms.
- Change in their behaviour or tiredness but they can still do the activities they enjoy
- Develops a persistent headache that doesn't go away (despite pain killers such as paracetamol or ibuprofen)
- Develops a headache that wakes them from sleep

You need to contact a doctor or nurse today.
Please ring your GP surgery or call NHS 111 - dial 111
Try to capture your child's episodes on video to take to the medical appointment

GREEN

Your child may have been diagnosed with one of the below conditions that requires no medical treatment.

Here are links for further information.

Breath holding attacks: www.nhs.uk/conditions/breath-holding-spells-in-children/

Simple faint: www.nhs.uk/conditions/fainting/

Reflex anoxic seizures: www.heartrhythmalliance.org/stars/uk/reflex-anoxic-seizures-ras

Night terrors https: www.nhs.uk/conditions/night-terrors/

Sleep myoclonus (Brief jerks of one or more limbs. Occurs only in sleep. No treatment needed)

Self Care
Continue providing your child's care at home. If you are still concerned about your child, call NHS 111 – dial 111
Try to capture your child's episodes on video to take to future medical appointments

www.what0-18.nhs.uk

This guidance is written by healthcare professionals from across Hampshire, Dorset and the Isle of Wight

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Any Questions?