

# Paediatric Pearls

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Previous editions are now all available at [www.paediatricpearls.co.uk](http://www.paediatricpearls.co.uk)



NICE updated its clinical guideline on [the epilepsies: diagnosis and management in adults and children in primary and secondary care](#) in January 2012.

The main changes from 2004 are with the pharmacological agents so may not be interesting to GPs and ED juniors. Here are a few relevant points:

- Only prescribe buccal midazolam or rectal diazepam for use in the community for children, young people and adults who have had a previous episode of prolonged or serial convulsive seizures [2012]
- Children and young people should be seen by a doctor trained in epilepsy (eg. a general paediatrician) within 2 weeks of their first afebrile seizure [2004]
- An EEG is not usually indicated after a first seizure but, if requested, should take place within 4 weeks [2004]
- HealthCare professionals should highlight the Expert Patients Programme ([www.expertpatients.co.uk](http://www.expertpatients.co.uk)) to children, young people and adults with epilepsies who wish to manage their condition more effectively [2012]
- Information that should be obtained from the child or young person and/or parent or carer after a suspected seizure is contained in [appendix D](#). [2004]

The shortest version of this NICE guideline is 117 pages long. You may like to look at the [NICE pathway version](#) instead. New emergency algorithm below.

Time 0 mins (1 <sup>st</sup> step)	Seizure starts Check ABC, high flow O <sub>2</sub> if available Check blood glucose	Confirm clinically that it is an epileptic seizure
5 mins (2 <sup>nd</sup> step)	Midazolam 0.5 mg/kg buccally or Lorazepam 0.1 mg/kg if intravenous access established	Midazolam may be given by parents, carers or ambulance crew in non-hospital setting
15 mins (3 <sup>rd</sup> step)	Lorazepam 0.1 mg/kg intravenously	This step should be in hospital Call for senior help Start to prepare phenytoin for 4 <sup>th</sup> step Re-confirm it is an epileptic seizure
25 mins (4 <sup>th</sup> step)	Phenytoin 20 mg/kg by intravenous infusion over 20 mins or (if on regular phenytoin) Phenobarbital 20 mg/kg intravenously over 5 mins	Paraldehyde 0.8 ml/kg of mixture may be given after start of phenytoin infusion as directed by senior staff. Inform ITU and/or senior anaesthetist
45 mins (5 <sup>th</sup> step)	Rapid sequence induction of anaesthesia using thiopental sodium 4 mg/kg iv	Transfer to paediatric intensive care unit

Source: [NICE status epilepticus guideline 2012](#)

[Working Together to Safeguard Children](#) is available on line. It contains detailed guidance on safeguarding and promoting the welfare of children and families. It is not necessary for all practitioners to read every part of Working Together to understand the principles and perform their roles effectively. GPs and ED doctors should read chapters 1, 2, 5 and 11 as a minimum.

[http://www.rcgp.org.uk/clinical\\_and\\_research/safeguarding\\_children\\_toolkit.aspx](http://www.rcgp.org.uk/clinical_and_research/safeguarding_children_toolkit.aspx) has other safeguarding resources (including training) for general practice and guidance on what you need to have in place.

The BMA has also just released a 69p child protection resource App. aimed at GPs and junior doctors. Read about it [here](#).

## “Sticky eyes”

The naso-lacrimal duct usually canalises around 8 months of fetal life but 20% of newborns show signs that one or both are blocked. Eyes start watering within 6 weeks of birth, they get sticky eyes and occasional conjunctivitis (swab and treat with topical antibiotics if conjunctiva are red).



Parents are advised to massage the sac x 6 per day and clean with cool boiled water. 90 – 96% of cases resolve by one year of age. Refer remaining 4 – 10% to ophthalmology at that point.

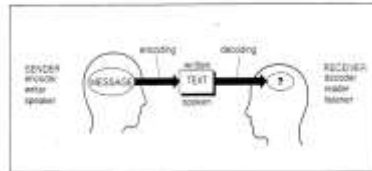
Patient information leaflet [here](#).  
Further professional reading [here](#).

### Treatment for conjunctivitis in babies:

- ◆ Sticky eyes do not need antibiotics unless conjunctiva are red
- ◆ Chloramphenicol eye drops are the medication of choice (no more than 50% of cases of conjunctivitis are bacterial in children (higher than in adults))
- ◆ [Ophthalmia neonatorum](#) (purulent discharge in first month of life with red eyes and often systemic upset) is a threat to sight and, depending on causative organism (usually chlamydia in the UK, gonorrhoea, occasionally herpes simplex), may need iv treatment. Please refer urgently to ophthalmology.

## Communication: intent v. effect

“The real meaning of a message is the response it generates” Dr Penny Trafford, GP Associate Dean, May 2012



LaCRU is the London Deanery run Language and Communication Resource Unit which offers language and communication skills training to all doctors and dentists (UK, EU and IMG) working in London. Free learning needs assessment. Course modules free to Deanery trainees, nominal fee to others. [Click here](#) to find out more.

## Blood Pressure (BP) in children

Blood pressure varies with height, weight, age and gender. What hope do we have of remembering normal values?! The [Advanced Paediatric Life Support Manual](#) offers the following equations as a ball park figure for systolic readings:

$$50^{\text{th}} \text{ centile BP} = 85 + (\text{age in years} \times 2)$$

$$5^{\text{th}} \text{ centile BP} = 65 + (\text{age in years} \times 2)$$

The cuff needs to be the correct size: > 80% of length of upper arm and bladder > 40% of arm's circumference. Too small a cuff leads to over estimation of BP.

What about hypertension? On the background of increasing obesity and BP being measured seldom and poorly in children, the [UK National Screening Committee](#) assessed this subject in 2010/11 concluding that, as there is no simple, validated test for identifying paediatric hypertension, the evidence did not support a national screening programme. They will revisit the topic in 2014/15.

In 2007 a team from UCLH published their cross sectional study of the measured blood pressures of nearly 23,000 children and young people aged between 4 and 23. [Click here](#) for their centile charts within the full text of their paper. They defined high blood pressure for age as blood pressure above the 98th centile and high-normal blood pressure for age as blood pressure between the 91st and 98th centiles. Others use [American data](#) with hypertension as >95<sup>th</sup> centile.

[Click here](#) for a PDF of tables in use in our paediatric outpatients.