

Paediatric Pearls

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Previous editions are all available at www.paediatricpearls.co.uk

Viral exanthems by Dr Andrew Lock (link to [whole PDF here](#))

1. Roseola infantum (see [January 2015](#) newsletter)
2. Pityriasis rosea (see [February 2015](#) newsletter)
3. Chickenpox (see [March 2015](#) newsletter)
4. Erythema infectiosum (see [April 2015](#))



5. Hand foot and mouth

- * Coxsackie A virus
- * Majority of affected children are <5 years
- * Blisters on hands and feet, and in the mouth
- * very infectious (may be outbreaks at schools or in families)
- * Incubation 3-5 days
- * Sore throat, fever and anorexia +/- lymphadenopathy and diarrhoea
- * Pink macules appear on both sides of the hands and sides of fingers which are followed by grey blisters, which dry and resolve over 5-7 days
- * May be small vesicles/ulcers in the mouth which can be painful and reduce oral intake
- * May also have an erythematous exanthem on the buttocks.
- * Blisters are infective until dry up. Stool remains infective for 1 month.

[PHE recommended period of quarantine](#) from school/nursery: none

Pictures: <http://dermnetz.org/viral/hfm-imgs.html>

Patient/parent information: <http://www.patient.co.uk/health/hand-foot-and-mouth-disease-leaflet>

Published in March 2014, the [quick reference guide](#) provides a summary of the main recommendations in **SIGN 138: Dental information to prevent caries in children.**

- ☑ Brush teeth with fluoride toothpaste (1000 – 1500ppmF, or 2800ppmF in high risk 10-16 yr olds) at least twice daily. Supervise younger children.
- ☑ Spit out excess toothpaste but don't rinse with water
- ☑ Fluoride varnish should be applied at least twice year
- ☑ Brush teeth as soon as they erupt, "smear" of toothpaste for under 3s, "pea-sized" amount for >3 yrs.



The preponderance of 'dental caries' as the primary diagnosis increases along with increasing socio-economic deprivation. Amongst the least deprived 10% of the population 31.9% of finished admission episodes (FAEs) for dental procedures were due to 'caries', whereas among the most deprived 10% of the population 61.2% of FAEs for dental procedures were due to 'caries'. www.hscic.gov.uk

Dangerous Dogs Act 1991

Two of the banned breeds:

Known for its working ability, loyalty and courage, the **Fila** is a large, heavy-boned dog with pendulous hips. Filas excel as guard dogs, cattle herding dogs, police dogs and hunting dogs, and are very loyal and eager to please their owners. They have a short coat. These dogs are highly territorial and possess an aversion to strangers. They are totally fearless in the face of danger.



[Click here](#) to find out how to report a dangerous dog in Waltham Forest

Built for performance, the **pit bull** is a muscular, short-coated breed. The head is big and jaws are strong and wide, the ears may be cropped. The body is very strong and powerful. Staffordshire Bull Terriers are often mistaken for Pit Bulls, but they are smaller in height.

The [Health and Social Care Information Centre](#) reported in April 2014 that there had been 6,740 admissions for dog bites in the previous year.

- Most represented group was 0-9 year olds.
- Highest admissions are in the summer months
- Most common injury was to wrist or hand but children suffer most injuries to the head of all age groups
- Plastic surgery is most common admitting team
- London had 634 admissions, 7.6 per 100,000
- Merseyside has highest number of incidents
- Children at 3 times the risk of dog bites or strikes in most deprived areas compared to least deprived regions

Some general advice for professionals when visiting an address with a dog:

- Ask the dog owner to move it to another room.
- Avoid making eye contact with the dog.
- Stand tall and be confident, they can sense fear.
- Avoid approaching the dog, they are territorial animals.
- Do not stroke the dog or put your face near the dog.
- Look for warning signs in the dog; growling or snarling, baring of teeth, pulled-back ears, tense body muscles and tail tucked away are just some of them.

If you visit an address and whilst there, you are in fear that you may be bitten by a dog because the dog is very aggressive, or you are bitten by a dog at the address, this dog is potentially 'Dangerously Out of Control' and the owner/keeper commits a criminal offence.

Knee Pain with thanks to Dr Ashraf Gabr

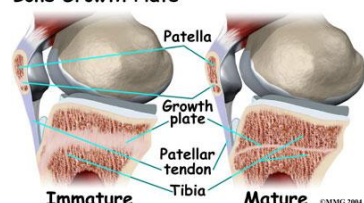
Knee pain is a very common complaint in childhood and adolescence. Common causes include:

- ☛ Trauma & sports injury (history not always clear in <6 yr). NB: **knee pain is often referred hip pain in young children.** Always examine the hip as well.
- ☛ Mechanical pain / growing pain. This is usually bilateral, diffuse, intermittent, late in the day, sometimes waking the child up in the middle of the night and increasing with physical activity. Eg. jumpers' knee which causes pain just below the knee cap especially in young footballers, runners or jumpers. [Click here](#) for more information. Jumpers' knee may be associated with [Osgood Schlatter's](#) which occurs in 10-15 year olds when there is too much tension in the patellar tendon from both sports activity and growth spurts. Beware night time knee pain; [growing pains](#) occur in 25-40% of children but should be a diagnosis of exclusion. Children with growing pains like to have their legs massaged; pain due to underlying oncology, inflammation or infection does not respond well to this level of touch.
- ☛ Reactive post viral arthritis always needs f/u to ensure recovery (if persists > 6-8 weeks it is more likely to be juvenile idiopathic arthritis (JIA)).
- ☛ Think about [rickets](#) in our vitamin D deficient population. Are knees and wrists swollen bilaterally? Check bone profile, vitamin D and parathyroid hormone levels.

RED FLAGS

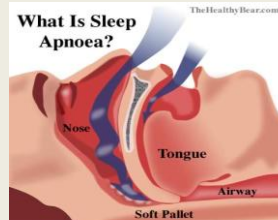
- ☑ Unilateral /or persistent (always [x-ray to exclude tumours](#) (most commonly a benign osteoid osteoma but malignant osteosarcomas do have a predilection for occurring around the knee joint))
- ☑ Associated with fever and signs of inflammation (septic arthritis / osteomyelitis), pallor and bruises (leukaemia)
- ☑ Adolescent, especially if overweight (is this [SUFU?](#) X-ray hips in frog leg position)
- ☑ **Night time pain that does not go away in the morning**

Bone Growth Plate Cross Section View



Pictures and patient information links from www.orthopediatrics.com

ENT slot with Mr Sunil Sharma



In obstructive sleep apnoea the tongue falls backwards and blocks off the airway, blocking breathing.

Obstructive sleep apnoea is 'a disorder of breathing during sleep characterised by prolonged partial upper airway obstruction and/or intermittent complete obstruction that disrupts normal ventilation during sleep and normal sleep patterns'. The [British Snoring and Sleep Apnoea assocⁿ](#) states that breathing must cease for a period of at least 10 seconds, at least 10 times an hour, for it to become clinically significant.

In the UK, approximately 12% of children aged 4-5 yrs snore on a regular basis.

Specifics in the history :

- severity of apnoeic symptoms
- daytime somnolence
- hyperactivity during the daytime (this can also suggest OSA in children)
- failure to thrive
- poor school performance
- secondary enuresis
- heart and lung conditions

When to perform overnight pulse oximetry? Which surgical patients need paediatric ITU facilities?

- History suggestive of severe OSA
- Age <2 years
- Weight <15kg
- Significant co-morbidities or syndromes
- Obesity (BMI >99th centile)
- Unclear history as to the presence of OSA

First-line treatment for OSA is adenotonsillectomy. If this does not resolve symptoms there may be underlying neuromuscular developmental problems.

Excellent UK [Multidisciplinary Working Party recommendations for management if OSA](#): Robb PJ1, Bew S, Kubba H, Murphy N, Primhak R, Rollin AM, Tremlett M. Tonsillectomy and adenoidectomy in children with sleep-related breathing disorders: consensus statement of a UK multidisciplinary working party. Ann R Coll Surg Engl. 2009 Jul;91(5):371-3.