Dr Emma Parish covers adolescent sleep problems this month as part of her series on adolescent health.

Wake up sleepy head!

The irony of writing this on a nightshift is not lost. Sleep, and lack of it, is a serious health risk and safety issue for young people; affecting concentration, appetite and wellbeing. See: http://www.nhs.uk/Livewell/Childrenssleep/Pages/teensleeptips.aspx, a useful guide for families about sleep hygiene. Key points to cover include bedtime routine (same time throughout the week), sleep environment (cool and calm), avoidance of devices (at least in the hour before bed) and avoiding the snooze button! A key theme when it comes to avoiding phones and screens in the hour before bed is that whole family intervention is better (and fairer) for everyone – so practice what you preach and leave that phone in the hall.

Struggling with post night shift fatigue yourself? There are some excellent tips for shift workers in this article: http://ep.bmj.com/content/edpract/102/3/127.full.pdf

See March 2013 newsletter for one of Dr Sophia Datsopoulos’ excellent articles on sleep: “What to do with night owls”.

Where have your patients been on holiday?

➢ Another viral disease (see Chikungunya last month) transmitted by mosquitoes which normally bite during the day
➢ Onset of illness occurs 4 - 10 days later: fever, muscle and joint pains. Sometimes a rash, sometimes mucosal bleeds.
➢ Diagnosis: IgM antibody levels but there is cross-reactivity with Chikungunya, see https://diasbestonline.org/tests/dengue-fever-testing
➢ No cure, no vaccine for travellers. Treatment is symptom relief
➢ Mostly occurs in tropical and sub-tropical regions but there have been outbreaks in southern Europe and southern USA. Symptoms usually mild in older children / adults. 1-2% of people who have had dengue before get severe dengue haemorrhagic fever.
➢ 2nd most common tropical feverish illness in returning travellers.

Update: rhinitis guideline (2017) from the British Association of Allergy and Clinical Immunology

➢ Allergic rhinitis is common and affects 10-15% of children and 26% of adults in the UK
➢ Affects quality of life, school and work attendance, and is a risk factor for development of asthma.
➢ Diagnosed by history and examination, supported by specific allergy tests.
➢ Topical nasal corticosteroids are the treatment of choice for moderate to severe disease
➢ Combination therapy with intranasal corticosteroid plus intranasal antihistamine is more effective than either alone and provides second line treatment for those with rhinitis poorly controlled on monotherapy
➢ Immunotherapy is highly effective when the specific allergen is the responsible driver for the symptoms
➢ Treatment of rhinitis is associated with benefits for asthma
➢ Non-allergic rhinitis also is a risk factor for the development of asthma
➢ Non-allergic rhinitis may be a presenting complaint for systemic disorders such as granulomatous / eosinophilic polyangiitis, sarcoidosis

This month in Jackie Driscoll’s vaccine update, we are skipping ahead to MMR (given first at 12-13 months) for a very good reason. We are in the middle of a measles outbreak with 757 laboratory confirmed cases of measles in the UK between January and July 2018. This is almost three times as many as in 2017: https://www.gov.uk/government/news/measles-outbreaks-across-england.

The outbreak is linked to a larger outbreak happening across Europe and as families travel over the holidays, we may see more cases coming back from abroad.

There continues to be widespread misinformation amongst the public about the seriousness of measles and the risks and benefits of the MMR vaccine.

What is the reality of measles infection?

➢ There were 15 deaths in Europe in 2017 due to measles infection. It mostly affects and kills young babies who are too young to be vaccinated but who could be protected if there was adequate herd immunity in the community.
➢ Complications of measles occur in 30% of cases depending on age and predisposing conditions:
  ➢ Otitis Media: 7-9%
  ➢ Pneumonia: 1-6%
  ➢ Post infectious encephalitis occurs in 1-4 per 1,000 children
  ➢ SSPE (subacute sclerosing encephalitis) occurs in 1 in 100,000 cases

Addressing concerns about the MMR:

➢ Children with an egg allergy can safely receive the MMR vaccine.
➢ 1 in 10 children may develop a fever, malaise and a measles like rash as their body’s immune system appropriately reacts to the measles part of the vaccine 6-10 days after administration. Prepare and reassure parents that this is expected and a demonstration that the vaccine is working.
➢ 1 in 50 children may develop mumps like symptoms 3 weeks afterwards, Prepare and reassure once again!
➢ There is no link with autism. See http://vk.ovg.ox.ac.uk/mmr-vaccine.

Can rotavirus cause seizures in young children?

After looking after a couple of babies earlier this year who presented with a seizure when the only pathogen grown was rotavirus in their stool, we found just the paper we were looking for: Karampataki K, Osborne L, Seah M-L, Tong CYW, Prendedor AJ (2018) Clinical characteristics and complications of rotavirus gastroenteritis in children in east London: A retrospective case-control study. PLoS ONE 13(3): e0194009. https://doi.org/10.1371/journal.pone.0194009

➢ 116 children (50 cases with gastroenteritis and proven rotavirus infection and 66 controls with rotavirus negative gastroenteritis), studied between June 2011 and December 2013.
➢ Age 1m to 16yrs, presenting to any of 3 sites in east London.
➢ Neurological manifestations, including afebrile or febrile convulsions, meningocerebritis, encephalalgia and cerebellitis were the most common extra-intestinal complications of any D&V infection (ie. not just rotavirus).
➢ The term ‘convulsions with mild gastroenteritis (CvGI)’ is used to describe non-febrile seizures that are associated with gastroenteritis in the absence of classic signs of dehydration or electrolyte imbalance. Prognosis is good with no link to epilepsy.
➢ Can be associated with a transient mild encephalopathy with a reversible lesion in the splenium of the corpus callosum on MRI.

An oral vaccine has been part of the UK immunisation schedule since 2013 and the cases have been reduced by over 70% in England and Wales since then.