



PEN

NHS
Doncaster and Bassetlaw
Teaching Hospitals
NHS Foundation Trust

November | 2021

What is PEN?

Welcome to the Paediatric Education Newsletter, a monthly education bulletin highlighting learning points, announcements, clinical cases & latest paediatric news.

Announcements

For feedback/queries/or wanting to contribute - please fill in the google form

<https://forms.gle/CTv5CYG1nckBapfi7>

Upcoming Events

17th Nov - School of Paediatric Meeting



Highlights from last month's teaching session...

SCORTCH infections

SCORTCH acronym has been suggested as an alternative to TORCH acronym for naming neonatal infections in light of the increasing incidence of Syphilis infections in the UK.

Syphilis is widely thought of a historical infection, leading to missed diagnostic opportunities and identification of congenital infection is often delayed. The epidemiology of infections is ever-changing but notably, the incidence of syphilis has been increasing in western industrialised countries since the 1990's. While most (~75%) of these infections are among gay and bisexual men who have sex with men, infections in women have increased by 117% from 2015



to 2019 (Fifer et al, 2021). Therefore, rates of congenital syphilis may also be on the rise and Paediatricians should be mindful of this whilst considering differential diagnoses and which infections to test for in the neonatal period.

To raise awareness of the rising incidence of syphilis, Penner et al have proposed the SCORTCH acronym to supersede the universally used TORCH acronym.

S = Syphilis

C = Cytomegalovirus

O = Other

R = Rubella

T = Toxoplasmosis

C = Chicken pox

H = Herpes simplex virus

While TORCH remains the accepted acronym the proposed update to SCORTCH has started a dialogue about updating thinking around congenital infections and Syphilis. Whichever acronym is used it is important to recognise rising infection rates and evolving epidemiology, to not miss important differential diagnoses.

References:

•Fifer, H; Hughes, G; Ladhani, S. Shining the light on congenital syphilis: from TORCH to SCORTCH – Archives of diseases in childhood. (2021). Accessed 26 October 2021, from <https://adc.bmj.com/content/106/10/937>

•Penner, J; Hernstadt, H; Burns, JE; Randell, P; Lyall, H. Stop, think SCORTCH: rethinking the traditional 'TORCH' screen in an era of re-emerging syphilis - Archives of diseases in childhood. (2021). Accessed 26 October 2021, from <https://adc.bmj.com/content/106/2/117>

Written by Holly Walker

Precocious Puberty

The topic started with a case presentation in which a 9-year-old girl presented with spotting.

According to the history given by the mother and the girl, she was poked by a boy in her class, which led to spotting.

There was a question of the social issue at that point, but after examination, the child was found to have pubertal signs, such as thelarche. Which later was confirmed with blood results and MRI head, which showed pituitary lesion. This was fully treated and the sexual characteristics were regressed.

Later social care was involved to find out about the boy's social circumstances.

Learning points below,

i) We discussed the definition of precocious puberty

Early puberty, also called precocious puberty, is when:

- girls have signs of puberty before 8 years of age
- boys have signs of puberty before 9 years of age

2) different terms such as menarche, thelarche...

Menarche - Menarche is the first menstrual cycle, or first menstrual bleeding, in female.

Thelarche - also known as breast budding, is the onset of secondary breast development, which often represents the beginning of pubertal development.

3) Causes of precocious puberty:

Central	Peripheral
Tumour (Brain or Spinal Cord)	Tumour (Adrenal gland, or leydig cells in boys)
Hydrocephalus	Exposure external oestrogen/testosterone
Radiation to brain or spinal cord	Ovarian cyst/tumour
Injury to brain or spinal cord	
McCune-Albright syndrome	McCune-Albright Syndrome
Congenital Adrenal Hyperplasia	
Hypothyroidism	

4) Treatment

- Central

- GnRH analogue (Monthly injection - aim to delay further development)

- Treating the underlying medical condition

Written By Afshan Tooba

Reviewed by Aaron Phua

Neonatal Seizures

1) Cause of neonatal seizures can be divided into hypoxia or structural.

Hypoxia can be HIE - caused by birth asphyxia (poor long term outcome)

Structural - Intraventricular Haemorrhage. SAH/SDH. Arterial Stroke. Congenital malformation - tuberous sclerosis. Holoprosencephaly

2) Recognise that this can present very subtly. The neurological system is immature. So please be aware of this.

3) For causes of focal neonatal seizures. Don't forget to think about viral infections (herpes). As this is not just a bacterial cause.

Presentation by Dr Sadaf Ahsan

Written by Aaron Phua