Welcome to the Paediatric Education Newsletter, a monthly education bulletin highlighting learning points from departmental teaching, interesting clinical cases and questions. We hope you find the PEN useful, we'd love to hear from you particularly if there is anything you would like to contribute! The PEN Team (Henry, Aidan and Hana)

WHAT LOOKS LIKE BRONCHIOLITIS BUT ISN'T?

It's winter again and we are seeing high numbers of wheezy, coughing babies with breathing and feeding difficulties on CHOU, many of whom will have bronchiolitis. There are, however, a number of important conditions to bear in mind when clerking and assessing these patients. Acute heart failure also causes breathing and feeding problems in babies and can mimic bronchiolitis, but the pathophysiology and treatment of the two conditions are very different. Here are some of the distinguishing features to look out for when thinking of acute heart failure in under 5s:

FEATURES IN THE HISTORY

- Difficulty feeding (from prolonged feeding time to tachypnoea and increased work of breathing during feeds)
- Cyanosis
- Poor weight gain
- Diaphoresis (sweating), especially during feeds
- Relevant family history/birth history (congenital heart disease, murmurs etc.)
- Poor response to fluid boluses
 - Worsening tachycardia, tachypnoea, hepatomegaly or acidosis
 - Very important to go back and review response in any child who has received a fluid bolus!

TEST YOUR KNOWLEDGE

Click on the link below to test your knowledge this clinical case of an infant with rapidly progressive respiratory distress recently published in Archives complete with CXR and ECG findings.



<u>Pintaldi S, Servidio AG, Bobbo M, et al</u> <u>Infant with rapidly progressive respiratory distress</u> <u>Archives of Disease in Childhood - Education and Practice</u> 2022;**107:**369-371.

Check out this interactive clinical case about an unwell neonate presenting to ED from RCEMLearning by clicking on the link below.

https://www.rcemlearning.co.uk/modules/getting-to-the-heart-of-the-matter/

FEATURES ON EXAMINATION

- Gallop rhythm
- Murmur
 - not always present and often difficult to hear in a tachycardic, tachypnoeic, wheezy baby
- Displaced apex beat
 - Normally 4th intercostal space, mid clavicular line in a baby/toddler
- Heaves and thrills
- Hepatomegaly
- Weak or absent femoral pulses
- Delayed CRT
- Skin mottling whilst this can be a sign of poor perfusion, mottling can be a benign response to changes in skin temperature (cutis marmorata). Its significance should be considered in the context of the overall clinical picture.
- Peripheral oedema not a reliable indicator of heart failure in children

FURTHER READING

Congenital Heart Disease - RCEMLearning https://www.rcemlearning.co.uk/reference/congenital

-heart-disease-2/

Oswal A, Holman J

<u>Fifteen-minute consultation: Cardiac murmurs in the Newborn</u> <u>Infant Physical Examination (NIPE)</u>

<u>Archives of Disease in Childhood - Education and Practice</u> 2022;107:326-329.

Menahem S, Sehgal A

<u>Fifteen-minute consultation: How to spot serious heart disease in</u>

the newborn

<u>Archives of Disease in Childhood - Education and Practice</u> 2022;**107:**95-100.

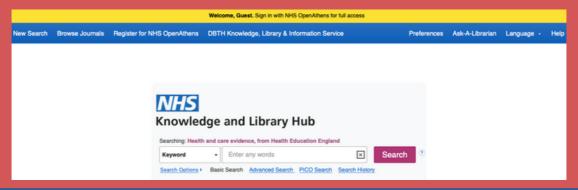
KNOWLEDGE & LIBRARY SERVICE AT DBTH

We are very fortunate in Doncaster and Bassetlaw to have an excellent Knowledge and Library Service with some fantastic resources. Sarah Gardner, our Clinical Evidence Specialist demonstrated some of these at a teaching session this month. Here are some of the great resources she talked about with links and information on where to find them for those who missed it.

Firstly the Resources and eResources webpage is a good place to start. It can be accessed via the following link. https://www.dbth.nhs.uk/services/library-services/resources/

From there you can head find the new NHS Knowledge & Library Hub. The hub is a fast, simple way to help NHS staff and learners get to high quality knowledge and evidence resources in one place.





Once there, sign in with an <u>NHS OpenAthens account</u>, and check out the Browse Journals feature at the top, filtering for paediatric titles in Medical Specialities > Medical Specialties O-Z > Pediatrics. Set up a personal account if you want to save titles, save articles or use the app.



Sarah also spoke about the new LibKey tool, which links you with full text access by using an article's DOI or its PMID.

If you've found the abstract of an article and want to see the full text, look for the article's DOI (Digital Object Identifier – effectively it's address on the internet) (or PMID) and pop it into the search box. e.g just the section in black text on the link here: http://dx.doi.org/10.1136/archdischild-2020-321206

Libkey will check to see if the entire article's available. If it is, you'll see links to the full text. If not, you'll see a link titled "Library Access Options", and then "Submit an ILL (Inter Library Loan) for this item" – click it to send a request to our library team.

Google Scholar

Lastly, Sarah showed how to add the NHS full text links to Google Scholar, by opening up the menu under the three bars on the top left, going into Settings > Library Links and searching for Doncaster & Bassetlaw. Click Save, and then all results which are available under NHS subscriptions will marked [FullText@mylibrary]. No more paywall pain!