



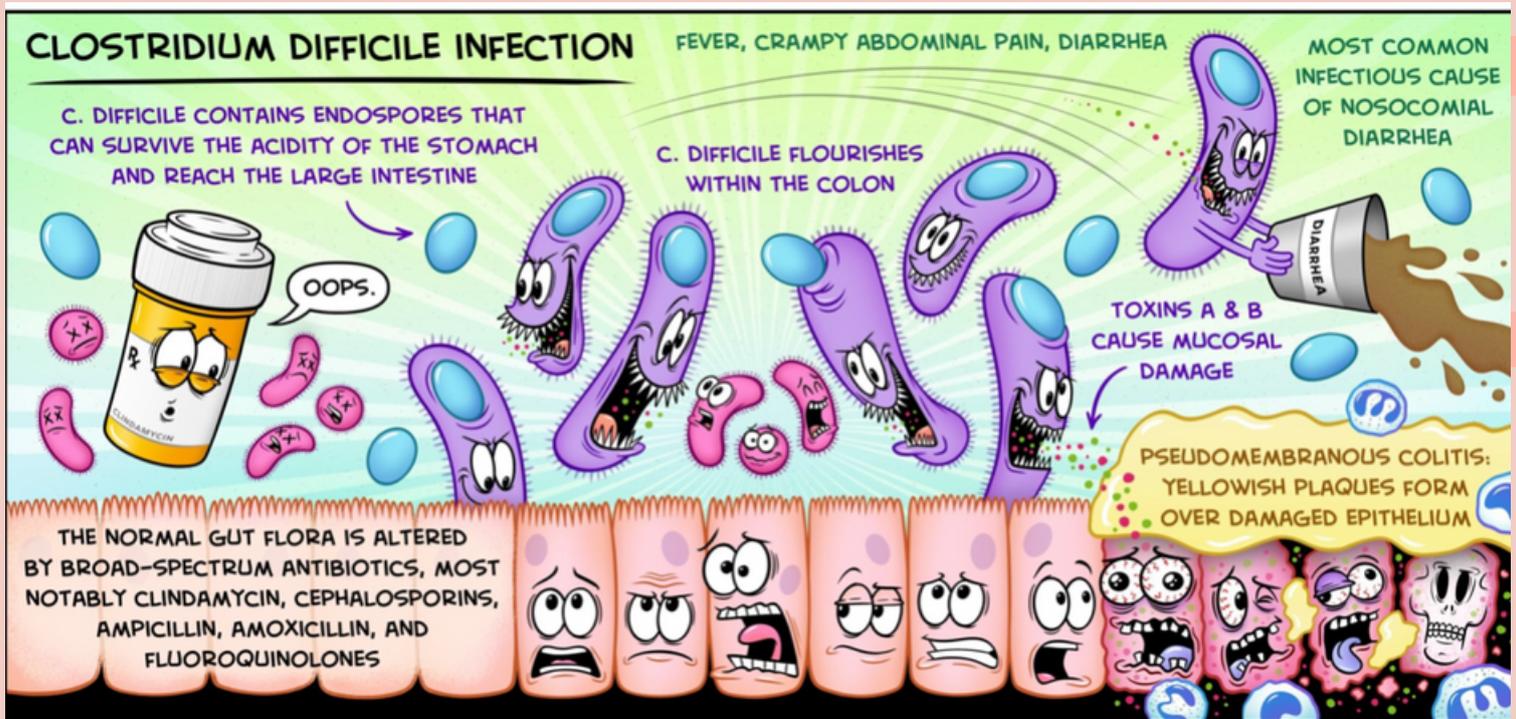
PARU LEARNING POINTS

APRIL 2022

"EDUCATION IS THE MOST POWERFUL WEAPON WHICH YOU CAN USE TO CHANGE THE WORLD"
NELSON MANDELA.



C. DIFF IN A NUTSHELL



Clostridium difficile is a gram positive anaerobic bacillus that secretes toxins which can cause diarrhoea and pseudomembranous colitis. It can colonise the intestinal tract after the normal gut flora has been altered by antibiotic therapy. This colonisation can occur after any antibiotic therapy but most commonly occurs with broad-spectrum antibiotics such as cephalosporins, clindamycin, amoxicillin and fluoroquinolones.

Symptoms of C diff infection include fever, crampy abdominal pain and diarrhoea. If left untreated, the condition can progress to toxic megacolon. Treatment includes stopping the suspected causative agents and using oral metronidazole. More severe cases, may require treatment with vancomycin.

Spotlight on NEHI Neuroendocrine Hyperplasia of Infancy

Childhood interstitial lung disease (chILD) is a heterogeneous group of rare disorders. NEHI is subgroup of Childhood interstitial lung disease (chILD) and is more prevalent in infants and children less than 2 years of age.

NEHI was first described in 2005 and the incidence and prevalence, as well as its aetiology, are still unknown. Familial cases with affected siblings have been reported.

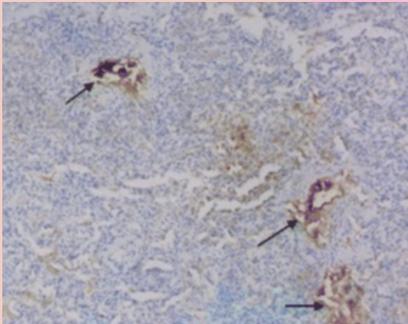
NEHI often presents insidiously within the first year of life and is mistaken as one of the more common lung diseases of childhood such as bronchiolitis or persistent/ recurrent respiratory infections. This can make the diagnosis of NEHI more challenging.



Diagnosis of chILD should be considered when a patient presents with:

- 1) Respiratory Symptoms (cough, tachypnoea or exercise intolerance)
- 2) Respiratory Signs (tachypnoea, additional sounds on auscultation, IWOB, digital clubbing, failure to thrive or respiratory failure)
- 3) Hypoxaemia
- 4) Specific diffuse abnormalities on chest imaging

Patients with NEHI typically present with chronic tachypnoea, increased work of breathing, hypoxia and failure to thrive. Crackles are more commonly noted on chest auscultation and wheeze is less common.



Investigations

CXR may be normal in NEHI or show evidence of hyperinflation with variable increased perihilar opacity.

HRCT is the gold standard diagnostic investigation in chILD. In NEHI, there may be signs of multi-lobar ground-glass opacity predominantly involving the right middle lobe and lingula, as well as a mosaic pattern of air-trapping.

A small number of cases may require a confirmatory lung biopsy which is the gold standard diagnostic investigation for chILD. In NEHI, histology on standard staining is often normal but there is an increase in pulmonary neuroendocrine cells after bombesin staining.

Treatment

- Management is generally supportive including:
- Supplemental O₂ (may be 24 hours/ day, nocturnal or during intercurrent illness)
 - Adequate nutrition
 - Vaccinations and minimising risk from viral infections

Studies have not shown significant benefits associated with Corticosteroids.

Prognosis

Most patients with NEHI will grow out of their oxygen requirement and improve over time.

Although patients improve over time, there have been reports of persistent airway obstruction mimicking severe asthma and relapse with respiratory infection.

There have been no known deaths associated with NEHI.



An important reminder...

In any baby that presents with prolonged jaundice, it is essential that we ask about stool colour!

Acholic stools are a red flag and must prompt an urgent review!

It can be useful to ask parents to look at stool colour charts and describe the colour of their baby's stool.

Here is a link to the stool colour charts:

<https://www.childliverdisease.org/wp-content/uploads/2018/01/Yellow-Alert-Stool-Chart-Bookmark.pdf>

H1	Healthy Stools	Suspect Stools	S1
H2			S2
H3			S3
H4			S4
H5			

Anxiety

We are all aware of the increasing mental health related presentations within our teenage population. However, it is useful to perform a HEADSSS assessment in all teenagers admitted to RHCYP (even if they are not presenting with an overdose or safeguarding concern!)

Below are some anxiety resources that can be printed and given to parents and our teenage patients if we identify that this is an issue during our HEADSSS assessment!



RESOURCES FOR PARENTS AND CARERS: ANXIETY AND WORRY

PARENT ANXIETY WORKSHOPS

What is it?

A two part recorded information session:

- [Part 1: Understanding Anxiety](#)
- [Part 2: Supporting Your Child With Anxiety](#)

How will it help?

The content of the workshop is based on cognitive behavioural therapy (CBT), the recommended treatment for managing anxiety and worries. The information sessions will help you learn more about what anxiety is and how you can support your child to overcome it.

How do I access it?

Click the links above or visit

Part 1: <https://vimeo.com/637899585/a4a632bd0c>

Part 2: <https://vimeo.com/637889751/e2d94cf5d5>

SUPPORTING CHILDREN WITH ANXIETY: COMPUTERISED CBT

What is it?

An online intervention that you can work through flexibly at your own pace. Access to the modules can be done anywhere and at any time on your computer, tablet or mobile phone. You work independently through these. There are two versions for parents, one for children and one for teens.

How will it help?

The modules are based on cognitive behavioural therapy (CBT), the recommended treatment for managing anxiety. The programme aims to help parents and carers who are looking to support their young person in dealing with worry and anxiety, while learning helpful strategies to tackle their own anxiety.

How do I access it?

<https://cyplothian.silvercloudhealth.com/signup/>

Access Code: Lothian

USEFUL WEBSITES, BOOKS AND APPS

Websites

Hands On: <http://handsonscotland.co.uk/>

Anxiety Canada: Online: <https://www.anxietycanada.com/>

Anxiety UK: <https://www.anxietyuk.org.uk/>

For Covid-19 specific resources visit:

[NHS Lothian's CAMHS COVID-19 Resources \(nhslothian.scot\)](https://www.nhs.uk/healthcareprofessionals/covid-19-resources)

Apps for 16+

For Sleep: [Sleepio: www.sleepio.com/nhs](https://www.sleepio.com/nhs)

For Anxiety: [Daylight: www.trydaylight.com/nhs](https://www.trydaylight.com/nhs)

Books

Helping Your Child with Fears and Worries: A Self-help Guide for Parents (2019) by Cathy Creswell and Lucy Willetts

The Huge Bag of Worries (2004) by Virginia Ironside

How to Stop Worrying (2009) by Frank Tallis

Additional Websites:

[Family Support Directory](#) | [Parent Club](#)

[Additional Online Resources from CAMHS NHS Lothian](#)

[Young Minds](#), a UK charity supporting young people's mental health

For more help with anxiety, speak to your GP or school in the first instance.

VISIT
WELLBEING
LOTHIAN FOR MORE
INFORMATION ON YOUR
MENTAL HEALTH AND
WELL-BEING

A warm welcome to our new foundation trainees and returning ST2s! Thank you to all the trainees for their efforts covering shifts recently, you are all stars!



If anyone has anything they would like to be included in future learning points, please send me an email :

jennifer.hendry3@nhslothian.scot.nhs.uk

Save the date!

The RCPCH conference is taking place face-to-face this year in Liverpool from the 28th-30th of June. If you are unable to attend in person, there is also a virtual offer available. Early bird rates will be available until the 16th of May so get booked in soon if you are thinking of attending!

Did you know?

Research has shown that a baby's language development can be accelerated if a parent makes an effort to respond to their baby's vocalisation more than 80% of the time. Typically, parents are only thought to respond to their baby 50 to 60% of the time! Let's encourage our parents to do lots of chatting!

Weekly SIM Update

Last week at PET training we were presented with a first seizure in a previously well teenager. The patient was in Status and it turned out they had taken an overdose of Mefanamic Acid.

Mefanamic Acid is an NSAID commonly used to treat heavy menstrual bleeding and dysmenorrhoea.

According to TOXBASE, in one study, 24% of 15-19 year olds who had taken an overdose presented with convulsions. Other milder features include drowsiness, blurred vision, headache, miosis, agitation, muscle twitching, hyperreflexia, nausea, vomiting, diarrhoea and haematemesis.

Initial treatment of convulsions would be benzodiazepines, however barbituates are recommended as second line therapy if seizures continue and phenytoin should be avoided!



Resource Update

Last week on PARU we had some brilliant teaching from Dr Ana Cockburn... A reminder that there is an RCPCH e-learning module on Bacterial Meningitis and Meningococcal Septicaemia that can be accessed on Compass.