



# PARU LEARNING POINTS

MAY 2022

"I CAN DO THINGS  
YOU CANNOT, YOU  
CAN DO THINGS I  
CANNOT: TOGETHER  
WE CAN DO GREAT  
THINGS."  
MOTHER TERESA



**Febrile Infants** - always consider HSV (especially in the first three weeks of life)



## CONSIDER HSV IF:

- MATERNAL HX OF GENITAL HSV LESIONS OR FEVERS 48 HOURS BEFORE/AFTER DELIVERY
- VESICLES
- SEIZURES
- HYPOTHERMIA
- MUCOUS MEMBRANE ULCERS
- CSF PLEOCYTOSIS WITHOUT POSITIVE GRAM STAIN
- LEUKOPENIA
- THROMBOCYTOPENIA
- ELEVATED ALANINE AMINOTRANSFERASE LEVELS

## RECOMMENDED STUDIES

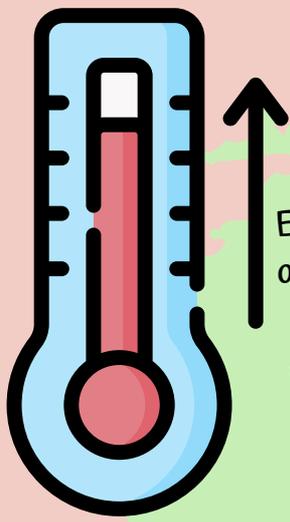
CSF PCR

HSV SURFACE SWABS FROM MOUTH, NASOPHARYNX, CONJUNCTIVAE AND ANUS FOR HSV CULTURE OR PCR ASSAY

ALANINE AMINOTRANSFERASE

BLOOD PCR

# Spotlight on Enteric Fever



Enteric fever is a systemic infection caused by the human adapted pathogens *Salmonella* Enterica (serotype *S.typhi*) and *S.Paratyphi* A, B, C. These organisms are an important cause of febrile illness among crowded populations with inadequate sanitation who are exposed to unsafe water and food. They also pose a risk to our patients as travellers visiting endemic countries. These bacteria are spread by faecal-oral route and most commonly, infection is caused by ingestion of food or water contaminated by infected human faeces.

**Last week on ARU, we had two patients with enteric fever. One positive for *Salmonella* Typhoid and the other positive for *Salmonella* Paratyphi A.**

## Epidemiology

Typhoid and Paratyphoid infection are more common in children and young people in comparison to older patients.

South-central Asia, Southeast Asia and Southern Africa are the regions with the highest incidence of infection. Other regions which are thought of as having a "medium incidence" include other regions of Asia and Africa, some parts of Latin America, the Caribbean and Oceania.

Humans are the only reservoir for *S.Typhi* and *S.Paratyphi* A therefore, there is normally a history of travel to one of the above countries or contact with a known typhoid case/carrier.

In endemic areas and in returning travellers, consider enteric fever in the differential diagnosis in patients with acute fever, particularly if they have abdominal symptoms.

## Presentation

Patients with Enteric Fever usually develop symptoms 7-14 days after exposure (with studies suggesting a range from 3-60 days) however, it is important to note paratyphoid has a shorter incubation period of 4-5 days. Otherwise, the symptoms between the two organisms are normally indistinguishable.

Patients normally present with a gradual onset of fever which typically rises to a plateau (around 39-40°C) towards the end of a week. This slow rise in fever is in contrast with the intermittent high fever seen in patients with Malaria. Other common associated symptoms include diarrhoea, nausea, vomiting and abdominal pain which is normally diffuse and poorly localised. Patients may also have headache, cough and general malaise. Often in the under 5 age group, fever is their only presenting feature.

Physical signs are normally non-specific but important to note the heart rate in relation to the height of the fever as often patients are relatively bradycardic. Patients may also develop soft, tender hepatosplenomegaly, ascites and abdominal distension (these symptoms are more commonly noted in children who are less than 5 years old).

Complications of enteric fever can include encephalopathy, GI bleeding, nephritis and cholecystitis and hepatitis.

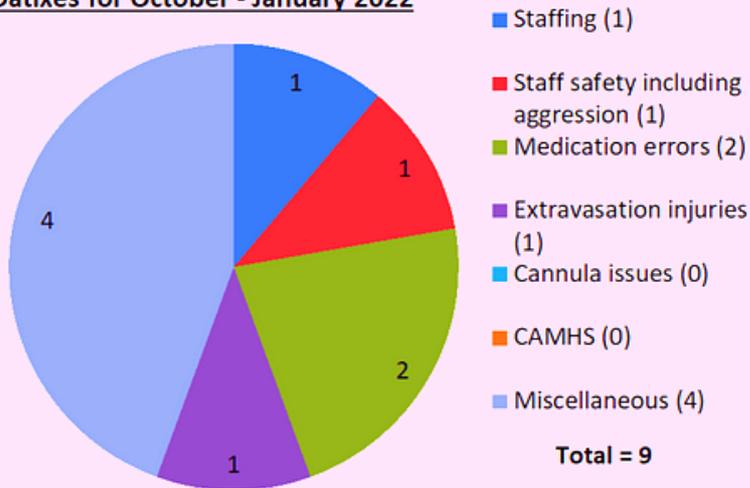
## Treatment

There have been issues with resistance to commonly used antibiotics in the treatment of *Salmonella* Typhi and Paratyphi. Currently, in Edinburgh, broad spectrum Cephalosporins are the recommended treatment whilst awaiting the results of the blood culture with sensitivities. Patients should remain an inpatient on antibiotics until their blood cultures are negative.

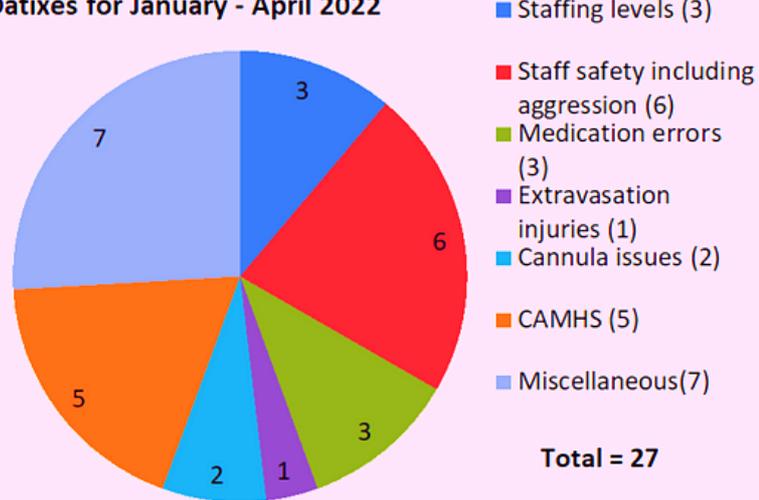
# Datix Meeting Highlights

The past six months have been very busy with high volume and acuity of patients, complicated by staff sickness. This has led to a significant number of datixes being completed for this reason.

Datixes for October - January 2022



Datixes for January - April 2022



## Learning Points

### **Aggression and violence – how to manage this on a children's ward?**

With more adolescent patients and patients requiring CAMHS input, we are encountering more aggression.

Improve your general management on learn pro: Lothian: Management of Aggression Core (Clinical)

· Refer to the intranet for guidance on medications to use:

<http://intranet.lothian.scot.nhs.uk/Directory/MedicinesManagement/MentalHealth/Guidelines/Acute%20Behavioural%20Disturbance%20Guideline%20CAMHS%2012-17yrs.pdf>

### **No longer require a test or scan? Please call radiology and cancel request!**

We have had a recent near miss where a child almost received a CT head that they didn't need.

### **Cannulas - avoid pressure marks, blistering, and extravasation!**

Please be mindful when inserting cannulas about pressure areas and try and protect the skin from this with the dressing etc. We should review need for a cannula on daily ward rounds.

If anyone has anything they would like to be included in future learning points, please send me an email: [jennifer.hendry3@nhs.scot](mailto:jennifer.hendry3@nhs.scot)

## INCIVILITY THE FACTS

### WHAT HAPPENS WHEN SOMEONE IS RUDE?

**80%** of recipients lose time worrying about the rudeness



**38%** reduce the quality of their work

**48%** reduce their time at work



**25%** take it out on service users

Less effective clinicians provide poorer care

### WITNESSES



**20%** decrease in performance



**50%** decrease in willingness to help others

### SERVICE USERS



**75%** less enthusiasm for the organisation

Incivility affects more than just the recipient  
**IT AFFECTS EVERYONE**

## CIVILITY SAVES LIVES

Being on the receiving end of or even just witnessing incivility reduces our performance level and is a patient safety risk.

## Remember about Greatix!

There are always important learning points from the Datix meeting but we can all learn from the brilliant work of our colleagues too!

Remember to fill in a Greatix for any staff member's excellent work!



### Update from Dr Laura Jones:

Recently, there has been an increase in prevalence of Group A Strep infection associated with chicken pox. These co-infections can cause significant morbidity and mortality. We need to be vigilant if we are reviewing children/young people with VZV who have secondary infection and/or fever after the spots have cropped.

## Resource Update

Remember to sign-up for an account on the MED NHS Lothian page for lots of useful paediatrics teaching:

<https://www.med.scot.nhs.uk/about-us>

Check out "Dragon Bytes Paediatric podcast" created by paediatric trainees based in Wales. There are new episodes on different topics most weeks.