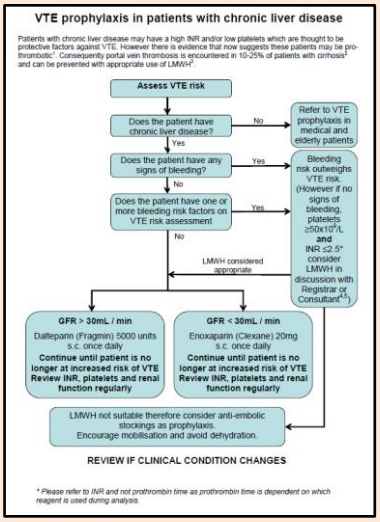
Patient Safety Matters

PROMOTING A CULTURE OF SAFETY AND QUALITY AMONGST JUNIOR DOCTORS ISSUE 14 – April 2017

VTE prophylaxis in patients with chronic liver disease

Spontaneous Bacterial Peritonitis (SBP) is the most common infection in patients with cirrhosis and is associated with significant morbidity and mortality rates of 20-40%. As patients with SBP may be asymptomatic all patients with cirrhosis and ascites should have an ascitic tap on admission to hospital, or when otherwise stable patients show deterioration. The first line empirical antibiotic is now Tigecycline, 100mg loading dose, followed by a 50mg twice daily maintenance dose (25mg twice daily if Childs-Pugh C cirrhosis). The normal duration is 5 days which may be extended if the response is slow. Following episodes of SBP, patients should be considered for prophylactic antibiotics, indefinitely or until ascites resolves, usually co-trimoxazole 960mg once daily (480mg once daily if GFR<30ml/min).



Patients with chronic liver disease may have a prolonged INR and/or low platelets which were previously thought to protect them from developing a venous thromboembolism (VTE). There is now evidence that these patients are more prone to VTE due to abnormalities in intrinsic clotting factors and anticoagulants.

Portal vein thrombosis is encountered in 10-25% of patients with cirrhosis and can be prevented with prophylactic low molecular weight heparin (LMWH). Therefore in patients with chronic liver disease, with no signs of active bleeding we strongly recommend the use of LMWH in patients with an INR of less than or equal to 2.5 and platelets of greater than or equal to 50x10*9/L. Please note “deranged LFTs”, “chronic liver disease” and “alcohol excess” alone are not contra-indications to LMWH.

Further detail and links to both guidelines can be found on Staff Room; http://staffroom.ydh.yha.com/policies-and-procedures/clinical/hepatology

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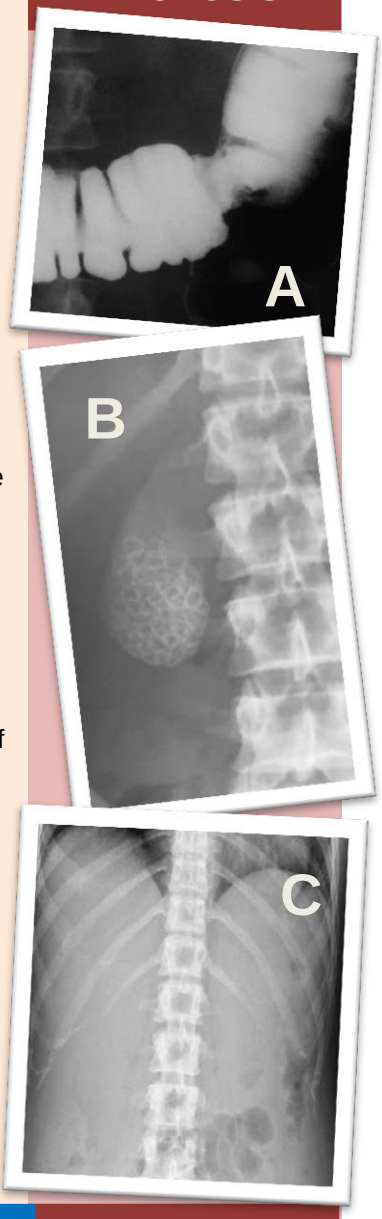
For more information a York Teaching Hospitals NHS Foundation Trust ‘How to perform an Ascitic Tap’ video is available on the Trust YouTube channel; https://youtu.be/QyDG-HhGem8

SPOT DIAGNOSIS

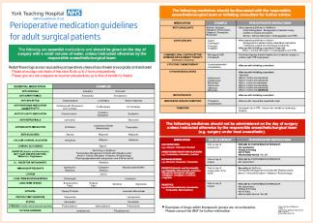


Answers on the last page. Send us your pictures!

Have you, or your team been involved in improvement work or research to improve patient safety? If so, we would like to invite you to submit an abstract to the Patient Safety Conference – more information on Page 4.

Pharmacy

Perioperative medication guidelines for adult surgical patients



The Trust has launched updated guidance on peri-operative medication. These guidelines include information on which medications should be given on the day of surgery, which should be omitted and instances where further advice should be obtained.

Poster guidelines will be made available on every ward area and are available to view on Staff Room;
http://staffroom.ydh.yha.com/policies-and-procedures/clinical/general-surgery-urology/perioperative-medication-guidelines-for-adult-surgical-patients/view

GTN infusion

There have been a couple of incidents this month relating to prescribing of GTN infusion on general wards. This is something that isn't often seen outside CCU so staff may be less familiar with its use. The Trusts' IV Guide, although primarily intended as a guide to IV drug administration, does give some helpful information on prescribing. This can be accessed from the medicines formulary link on staff room (under quick links towards the bottom of the page).
http://staffroom.ydh.yha.com/policies-and-procedures/clinical/pharmacy/iv-monographs/glyceryl-trinitrate-gtn-iv-monograph/view

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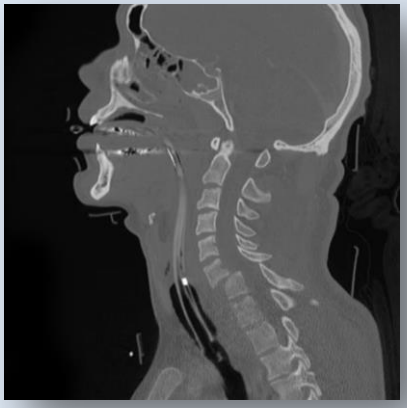
Investigating Spinal Injuries

A gentleman in his early 70's presented to the Emergency Department, having sustained a significant head injury from a fall down a flight of stairs. At the time of his admission he was lucid and orientated, but complained of pain in both wrists. His cervical spine was clinically cleared, and spinal precautions removed in the Emergency Department. Following a normal CT scan of his head and normal radiograms of his wrists he was admitted under a Medical Team.



Over the next 12 hours he developed worsening neck pain and weakness in his arms which was subsequently investigated with a CT and MRI scans of his neck. A fracture of his 3rd cervical vertebrae was diagnosed. The patient required admission to the Intensive Care Unit for monitoring and respiratory support, prior to transfer to a spinal injuries unit. Unfortunately the patient has developed a significant neurological impairment.

A review of this case highlighted the importance of ensuring appropriate investigation of potential spinal injuries. It is estimated that up to 33% of spinal injuries may be missed in trauma. The North Yorkshire and Humberside Major Trauma network has guidelines[1] to assist with decision making in these cases. This outlines the indications for a CT scan of the cervical spine in trauma cases; essentially patients who have a GCS<13, have significant mechanisms of injury, are over 65 years old or who have altered neurology will require a CT scan, as will patients with trauma requiring CT scans of other body parts.

Cervical spinal injuries can have major life-long implications for patients, but may be difficult to diagnose. Always consider the potential for neck injuries in any patient with trauma.

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Reference:
[1]http://www.nyhtraumanetwork.nhs.uk/information-for-clinicians/trauma-management—guidance

The IGNAZ App – for junior doctors

The IGNAZ smartphone app has been developed within the Trust to provide junior doctors with access to the latest key clinical information from Staff Room in an easy and simple way.
The app is available to download on Staff Room: http://staffroom.ydh.yha.com/Learning-Development-and-Professional-Registration/postgraduate-education/the-ignaz-app-for-junior-doctors
or if you would like to suggest any clinical content please contact Jocelyn.matthews@york.nhs.uk

Tracheostomy Safety and Care

In November 2015, we moved from using Tracoe Twist tracheostomy tubes to Portex. Portex has a 15 mm connector on the tube as opposed to the inner cannula, therefore it can be connected to the anaesthetic and ventilator breathing circuits without the inner cannula in place. This is regarded by some as a safety feature.

Portex is a two-piece tracheostomy tube with outer and inner cannula and can remain in-situ for up to 30 days. To prevent secretions adhering to the inside of the tracheostomy tube and reducing lumen diameter, daily cleaning of the inner cannula is necessary. If secretions are not removed patients may experience increased physical exertion when breathing and/or airway obstruction. Care must be taken when handling, inserting or removing the inner cannula as the walls are thin and can easily be misshapen, kinked or twisted.

After a successful trial in Critical Care, the change was extended Trust-wide in October 2016. Since the introduction of Portex tracheostomy tubes, six Datix forms have been completed; five of these related to damage to the inner cannula of the tube.

One possibility for the damage to the inner cannula, is that the tube was cleaned with the metal-core brush, included in some packs. Critical Care order the most basic pack (without the brush and other accessories) and continue to use soft foam swabs for cleaning.

Cleaning and checking

- Remove the inner cannula for cleaning and replace it with a new or cleaned inner cannula
- Rinse with sterile 0.9% saline
- To loosen any encrustations, use a KAPITEX Trachi-Swab cleaning aid
- Inspect for any defects (discard if defective)
- Store the cleaned inner cannula for the next change.

The inner cannula should be cleaned using a soft foam swab, the KAPITEX Trachi-Swab cleaning aid

Key Points for Tracheostomy Care

Cuff pressure should be monitored to reduce risk of impaired tissue perfusion, necrosis and tracheal stenosis.

The frequency of **endo-bronchial suctioning** varies between patients and requires constant re-assessment. Insert the catheter with the suction 'off' to avoid trauma. Insert the catheter until the patient coughs, but no further than the carina. Apply continuous suction whilst withdrawing slowly. To avoid hypoxia, do not suction for more than 10 seconds.

Sub-glottic secretions, collecting above the cuff, should be aspirated via the sub-glottic suction port gently with a 20ml syringe.

Dressings should be changed at least every 24 hours, and earlier if wet or soiled, to prevent skin damage and impaired stoma healing.

Metal-core brushes are not advised for cleaning the inner cannula and can damage the inner cannula

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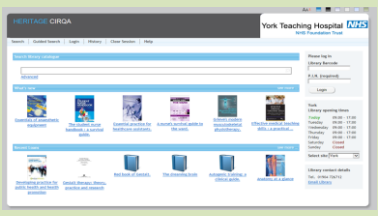
With thanks to **Dr Henry Paw**, *Consultant Anaesthetist,* Henry.Paw@York.NHS.UK

For further information the Out of Hours Emergency Tracheostomy management algorithm is appendix 7 of the Tracheostomy & Laryngectomy Guidelines for Adult Patients available on Staff Room.
http://staffroom.ydh.yha.com/policies-and-procedures/clinical/critical-care/critical-care-clinical-guidelines/tracheostomy-laryngectomy-management-in-adult-patients/view

Accessing Library Resources



The easiest way to find out what books are available from the Trust library service is to search the online catalogue at http://bit.ly/1DrTx5X

We also offer a document supply service for any books or journals not held within the library. Request forms are available at http://staffroom.ydh.yha.com/Learning-Development-and-Professional-Registration/library/guides-and-forms/forms or paper forms are available in the library.

For access to free national and regional NHS databases and journals at https://www.nice.org.uk/about/what-we-do/evidence-services/journals-and-databases you will need and NHS Open Athens account. To register go to https://openathens.nice.org.uk/ You will also need this account to access UpToDate off site.

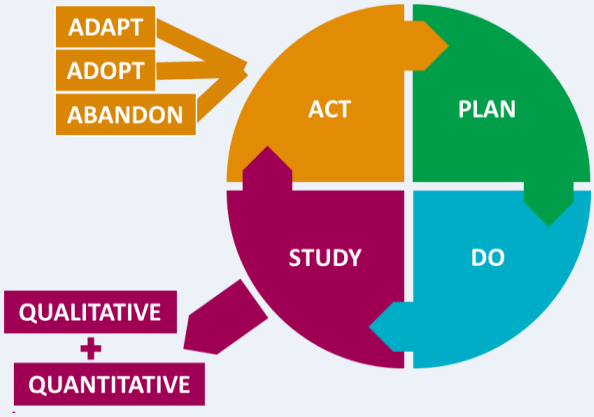
If you want refresher training on how to search the databases or look for articles contact the Clinical Librarians at either site.

For any queries on any of the above information please contact the library at **library@york.nhs.uk**

Quality Improvement Tips - Plan Do Study Act Cycles

Once you have identified the problem you want to tackle, you have specified your aim(s) and measure(s) and have begun thinking about change ideas you need a structured approach to testing your ideas. **Plan Do Study Act (PDSA) cycles provide this structure**. The cycle is made up of four stages as shown below; with each cycle you can test and then tweak your change idea or test further change ideas. With each cycle you will gain increasing knowledge of the system you are working in and how any changes you are making fit it.

PLAN	**What questions do we want to answer with this PDSA cycle?** **Predictions**: (for each questions listed, what will happen when the plan is carried out?) **The Change**: (what is the idea specifically, who, when, where and what is needed to test it so we can gain knowledge) **Plan for collection of data**: (specifics on use of data: what who, when, where?)
DO	**Carry out the plan**; document **problems and unexpected observations**; **collect data** and begin analysis. Are we really carrying out the plan as detailed above?
STUDY	Complete **analysis of data**; what were the answers to the questions in the plan? Compare the data collected to **predictions** from the plan and **summarise what was learned**.
ACT	**Adapt** (tweak idea and run another cycle), **adopt** (implement) or **abandon** the idea.



Check out the Institute for Healthcare Improvement for further information about PDSA cycles: http://tinyurl.com/lulnqg6

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Reference: 1. Langley et al (2009) The Improvement Guide – A practical approach to enhancing organizational performance (2nd Edition), Jossy-Bass, USA.

York Teaching Hospital NHS Foundation Trust

Patient Safety Conference

Friday 9 June 2017 York Racecourse

If you wish to submit an abstract the guidance, template and more information can be found at:
www.yorkhospitals.nhs.uk/psconference2017
To register a place on the conference please contact: Liz.Jackson@york.nhs.uk

Spot Diagnosis - Answers

A - Classic Apple Core lesion in the colon - Differential diagnosis: 1) TB of colon 2) carcinoma of colon 3) metastasis 4) diverticular stricture 5) endometriosis 6) ischemic stricture 7) lymphoma
http://facultyofmedicine1.blogspot.co.uk/2010/11/what-is-your-medical-diagnosis-213.html
B - Cholesterol gall bladder stones http://facultyofmedicine1.blogspot.co.uk/2011/01/what-is-your-medical-diagnosis-299.html **C – Ascites** - http://facultyofmedicine1.blogspot.co.uk/2010/11/what-is-your-medical-diagnosis-215.html
Send your 'spot diagnosis' pictures to PatientSafetyMatters@york.nhs.uk

Group Representation

We are working to **empower** and **support** junior doctors to attend and **contribute** to Trust level meetings. Junior doctors and groups will benefit! The following groups are looking for junior representation:

- **EPMA (Electronic Prescribing)**
- **HIPCG (Infection Prevention)**
- **Point of Care Testing Committee**
- **Admission Proforma Group**
- **Deteriorating Patient Group**
- **Patient Experience Steering Group**

Contact PatientSafetyMatters@york.nhs.uk for more information or if you would like to get involved.

Editorial Team

Email PatientSafetyMatters@york.nhs.uk if you have any comments or would like to contribute.
Check out www.yorkhospitals.nhs.uk/patientsafetymatters/ for more information