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**Rubbish** – its not the first time we've talked rubbish but Amy has commenced a project in the ED to reduce the financial and environmental costs of the ED rubbish disposal.

"As a result of an audit on the yellow clinical waste bins recently, it was found that 90% of waste found in the clinical waste bins was actually general waste. Not only is this costly for the department, but it is also bad for the environment. Similarly it was noted that we did not have any real recycling regime put in place which is also harmful to our environment as items which could be recycled have previously been sent to landfill.

For these reasons, we have begun an education campaign to educate staff what waste is to go in what bin.

- Yellow bins are only to be for clinical waste I.e items blood stained or infectious.
- Clear plastic-lined bins are for all other waste. If you are not sure whether something is general or clinical waste, please ask someone else prior to putting your rubbish in the bin.
- Green plastic lined bins are for recyclable waste. If you would recycle it at home, then you can recycle it here. Please note: While some council areas allow foam cup recycling, the Sutherland Shire Council does not, therefore please put your foam cups in general waste. Any recyclables (such as cardboard coffee cups, the bottom half of pizza boxes) which are soiled are to go in general waste bins.

So please consider these points and stop and think before we put our rubbish in the certain bins.

#### **THIS WEEK**

Carnett's Sign	
Pen in the neck	
Diverticulitis	
Neck Week's Case	
Joke / Quote of the Week	
The Week Ahead	

A collection of points

# Carnett's Sign

A patient presents with RIF pain after a kick to the abdomen while playing rugby. On examination there is tenderness in the RIF, with no peritonism. How can we clarify if this is within the abdominal wall or within the peritoneal cavity?

One sign recently discussed in Medscape was Carnett's sign. The initial description of this signs was to have the patient supine – ask for the exact point on the abdominal wall where the tenderness is maximal. The patient is asked to fold their arms and sit halfway up (or get the patient to lift their head and neck of the bed as a compromise ) while the examiner keeps their hands on the point of tenderness.

The hypothesis was that if the pain was arising from the viscera within the peritoneal cavity, the tensed mm would protect the abdominal cavity by lifting the examiners hand up and away, with the result of a lessening report of the discomfort.

However if the pain was coming from the abdominal wall, the pain will be intensified.

So consider Carnett's signs when clinically relevant. However as in any case / sign , use the history, examination and relevant tests, all combined together with a mix of common sense and caution.

### PEN IN THE NECK

Some studies are more memorable than others such as the one that debunked the "John Thomas sign". Similarly Medscape recently reviewed an article published in Emergency Medicine Journal, a German blend of Myth busters and McGuyver looking at saving a dying person's life by using a pen for a cricothyroidotomy. Not surprisingly, this study suggests the public shouldn't try that trick at home.

Researchers had 10 medical lay people (police officers, students and lawyers- maybe if the lawyer was the one on the table the study would have led to a different result?) try to push 3 different types of ballpoint pens through the necks of fresh cadavers to create a passage to the airway, looking at their inner diameter, their demountability to form a cannula and their airflow properties (using formal spirometry!).

**Results** Two of three pens had inner diameters of >3 mm and were both suitable as cannulas in a tracheotomy. Note that the Montblanc Masterpiece Platinum was suitable for this purpose but I don't think there'd be many ED staff using this type of \$600 pen on the floor.

Six of the participants punctured the neck too low and stabbed the thyroid gland. Three of the participants punctured the neck at the right spot.

All participants could perforate the skin with both ballpoint pens. However, almost no one could penetrate through the cricothyroid ligament or the ventral wall of the trachea, except for one participant. He performed the tracheostomy after three attempts in >5 min with a "lot of patience" and force (+ caused damage to the neck and airway).

THP – use your pen for writing

**Refs**-Kisse U et al, Bystander cricothyrotomy with ballpoint pen: a fresh cadaveric feasibility study *Emerg Med J doi:10.1136/emermed-2015-205659* 

#### **DIVERTICULITIS ADVICE**

A 65yo man previously well presents with LIF pain. It had been worse the night before yet he did not have transport – it was starting to settle. On exam he is afebrile yet has LIF tenderness with rebound. A scan shows stranding c/w sigmoid diverticulitis yet no free gas or abscess. What should you advise him?

Late 2015 the American Gastroenterological Association published their Guideline for the Management of Acute Diverticulitis.(For a full version check out the <u>link</u>). Based on a review of the literature they had a number of recommendations relevant to the above question, the most interesting we'll leave to last.

**Routine colonoscopy afterwards?** – Yes – They suggests that colonoscopy be performed after resolution of acute uncomplicated diverticulitis in appropriate candidates to exclude the misdiagnosis of a colonic neoplasm, if a high quality exam of the colon has not been recently performed. (Low quality evidence)

**Diet?** – High fibre - The AGA suggests a fiber-rich diet or fiber supplementation in patients with history of diverticulitis to reduce risks of recurrent diverticulitis, diverticular complications, and need for surgery (Very low quality evidence)

**Nuts?** OK – They suggests against routinely advising patients with a history of diverticulitis to avoid consumptions of seeds, nuts, and popcorn. (Very low quality evidence)

**Aspirin?** OK - They suggests against routinely advising patients with a history of diverticulitis to avoid the use of aspirin (unless for impending scope +/- biopsy) (Low quality evidence)

**NSAIDS?** – No – They suggests advising patients with a history of diverticulitis to avoid the use of NSAIDs if possible . (Very low quality evidence)

**Rifamixin or Mesalamine**- No – They recommends against the use of mesalamine or rifaximin after an episode of acute uncomplicated diverticulitis to prevent recurrence, decrease pain, or need for surgery.

**Probiotics?** – No- suggests against the use of probiotics after acute uncomplicated diverticulitis to prevent recurrence, decrease pain, decrease complications or need for surgery.

**Activity** – Yes – They suggests advising patients with diverticular disease to consider vigorous physical activity as a measure to decrease recurrent disease. (very low quality evidence)

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And saving the most controversial for last

**Antibiotics** –They suggest that in patients with CT-documented acute uncomplicated diverticulitis, the use of antibiotics does not seem to improve symptoms or decrease the need for surgery, and may not decrease the development of complications or recurrence rates. The AGA suggests that antibiotics should be used selectively, rather than routinely, in patients with uncomplicated disease. However due to the low quality of evidence their recommendation is "Conditional"

Our current standard of care is the use of oral or IV antibiotics. However there is an growing body of evidence that acute diverticulitis may be more inflammatory than infectious. Two recent randomized trials and two systematic reviews have reported no clear benefit and questioned their routine use, as does this guideline, suggesting selective and individualized use.

Note that the current data is of low quality, and recommendations could change as further studies are performed

Further the patients studied were inpatients with CT-confirmed uncomplicated disease; therefore, the results should not be generalized to complicated patients (i.e., those with abscesses or fistulas), those with signs of severe infection or sepsis, the immunosuppressed, or patients with other significant comorbidities.

Outpatient management without antibiotics has also not been studied, yet it would be expected that these patients would have generally milder disease and logically equal or better outcomes.

With further evidence we may be shifting away from the use of antibiotics for diverticulitis, like otitis media, asymptomatic bacteruria, abscesses, bronchitis etc- so "watch this space". In the mean time look at the history, exam and investigation, discuss the issues with the patient and the options yet consider the current standard of care.

### **NEXT WEEK'S CASE**

A 25 yo lady presents with left foot pain after falling off a ladder – below is a diagram used in the EMR to demonstrate the location of the pain.

An Xray is performed



- 1) Ligament rupture
- 1 racture





What should you be concerned about? Where to next?

### **JOKE / QUOTE OF THE WEEK**

Probably the more accurate spelling for this but last week a patient was described as drinking "1 bottle of Champain per day"

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Please forward any funny and litigious quotes you may hear on the floor (happy to publish names if you want)

## THE WEEK AHEAD

Tuesdays - 12:00 - 13:45 Intern teaching -Thomas & Rachel Moore

Wednesday 0800-0900 Critical Care Journal Club. ICU Conf Room / 12.00-1.15 Resident MO in

Thomas & Rachel Moore

Thursday 0730-0800 Trauma Audit. Education Centre / 0800-0830 MET Review Education centre / 1300-1400 Medical Grand Rounds. Auditorium.

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