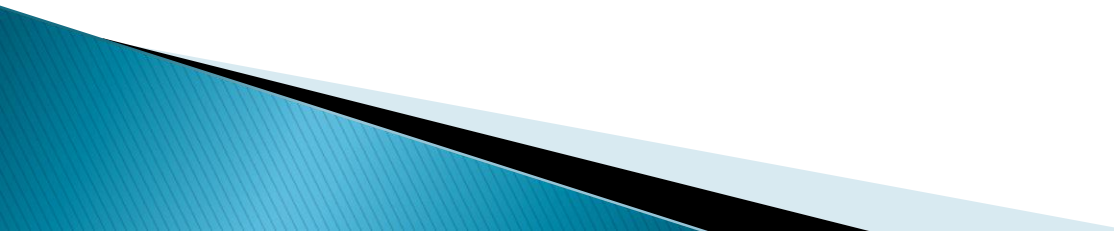


# Oncological Emergencies

Clare Pollard  
ST6 AIM & GIM

# Talk Plan

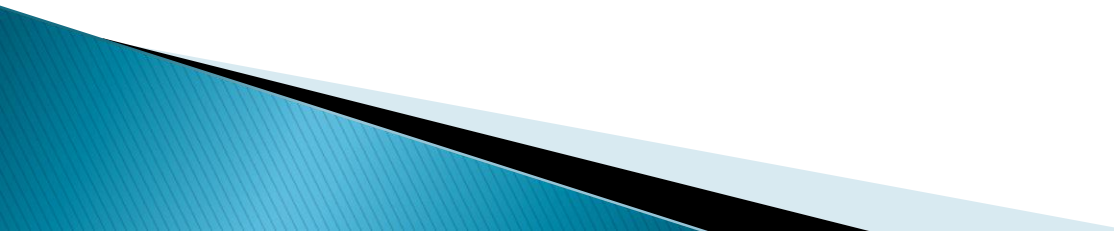
- Interactive session
  - Challenges of the oncological patient
  - Hot topics
    - > Neutropenic sepsis
    - > Spinal cord compression
    - > Hypercalcaemia
  - Relevant trust guidelines
  - Q+A
- 

# Challenges

- ▶ Audience experiences?




# My thoughts...

- ▶ Venous access
  - ▶ Long lines– hickman, PICC
  - ▶ Potentially sick/unstable
  - ▶ Life limiting/uncertain prognosis
- 

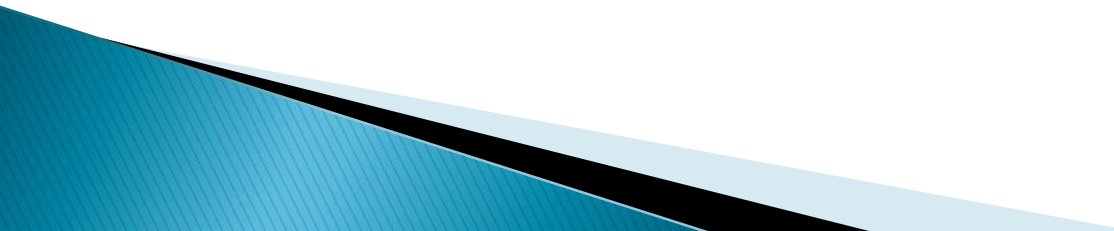
# Neutropenic Sepsis

- What is it? *As per Trust Guideline for the Management of Neutropenic Sepsis*
- Febrile Neutropenia is defined as a patient with a neutrophil count  $< 1.0 \times 10^9/l$  and a temperature of  $> 38$
- Beware of septic/shocked neutropenic w/o temp. May be hypothermic!!! Can you still do blood cultures in this case?
- Patients often educated during chemotherapy about what to look out for. May well have spoken to oncology specialist nurse

# What should we do on AMU?

- MEWS
  - Blood testing for FBC (urgent): U&E's, clotting, G&S, lactate, Peripheral Blood cultures (& central line – from each lumen). Why these tests?
  - Obtain urine, sputum, wound swab and line swab for culture. Why is culturing particularly important in these patients?
  - Urgent Medical review
  - ALL suspected neutropenia sepsis patients to be categorised orange
- 

# Clinical Assessment

- Should be thorough
  - **A–E if unwell as per ALS.** What do you want to know for each?
  - Pay special attention to the chest, Hickman / PICC site, oral mucosa and skin/perineum (avoid PR examination–why?)
- 

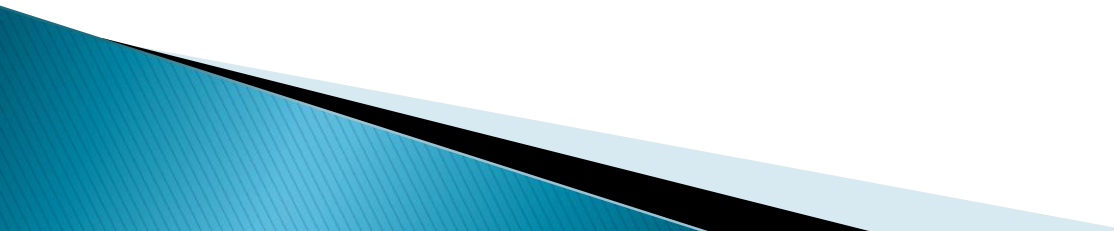
# Treatment

- **A/B**:
- Oxygen therapy titrated to maintain oxygen saturation at 95%
  
- **C**:
- Blood cultures
- Commence IV antibiotics **WITHIN 1 HOUR** of arrival (national & local policy)
- **EITHER PIPERACILLIN-TAZOBACTAM (TAZOCIN) 4.5 g tds (push dose 3–5 minutes) *OR* MEROPENEM 1g tds (push dose over 5 minutes) – if allergic to penicillin**
- **DO NOT WAIT FOR FBC RESULT– IF SUSPECT NEUTROPENIA TREAT**



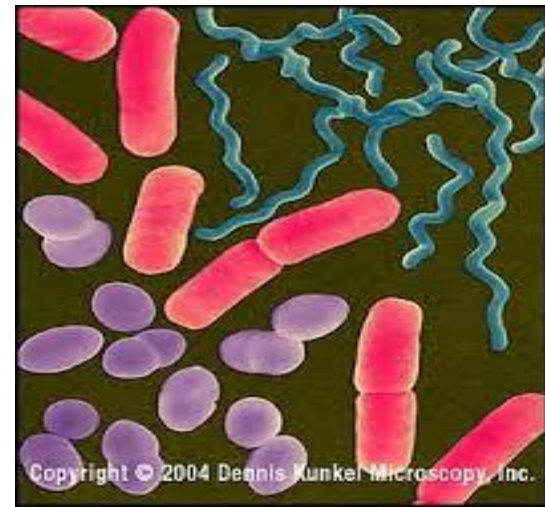
# Circulation

- If hypotensive – fluid challenge. **THINK IN TERMS OF 20mls/kg OF FLUID** i.e. for 80 kg man = 1600mls fluid
- VBG/ABG
- Fluid balance monitoring
- Consider a catheter
- Which patient with neutropenic sepsis do you think might need a catheter?

- D: Don't forget the glucose!
  - E: Everything else. Rash, neck stiffness, joints
  - Other considerations– spectrum of organisms, barrier nursing, potential for deterioration
- 

# Organisms

- ▶ Gram negative bacteria
- ▶ Gram positive bacteria (in dwelling lines, chemotherapy-induced mucositis)
- ▶ Antimicrobial resistance
- ▶ Fungal infections i.e. candida



# Other Guidelines

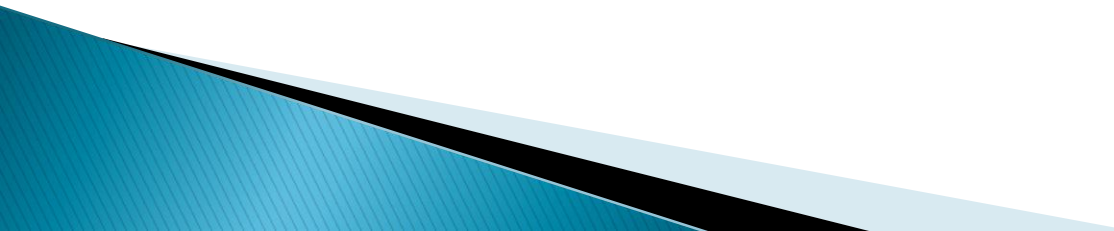
- **PATHWAY FOR LOW-RISK NEUTROPENIC SEPSIS / FEBRILE NEUTROPENIA**– available @ [www.acutemedicinebhh.com](http://www.acutemedicinebhh.com)

This pathway should only be used for adult ONCOLOGY patients with neutropenic sepsis/febrile neutropenia presenting to Acute Medicine at BHH to...

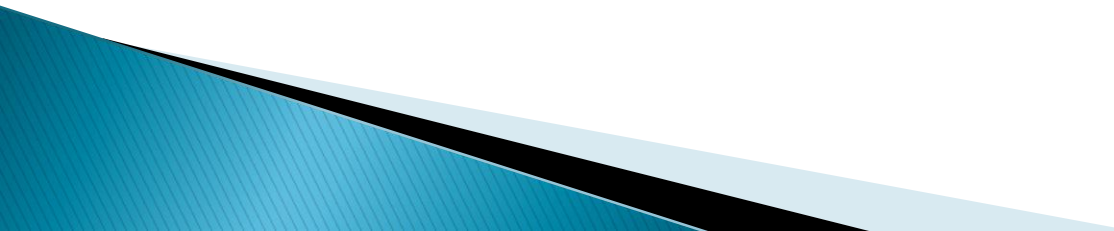
identify patients at low-risk of complications/death who *may* be suitable for oral antibiotic therapy and early discharge **FOLLOWING a 24h period of observation in hospital**

- MASCC score

# Ongoing Care

- ▶ Contact Haematology/ Acute Oncology team for discussion on future management. Patients alerted to onc specialist nurse
  
  - ▶ May advise about G-CSF etc
- 

# Spinal Cord Compression

- ▶ **Time is spine!**
  - ▶ Pathway for Patients with symptoms of MSCC:  
Trust Guideline
  - ▶ What problems may patients present with?
- 

# Red Flags

- Radicular pain
  - Any limb weakness
  - Difficulty in walking
  - Sensory loss
  - Bladder or bowel dysfunction
- 
- Patient may have a known diagnosis of malignancy but they may not. May be referred as a fall. **Trust your intuition. Bad smell test?**

# Investigation

- ▶ MRI whole spine ASAP





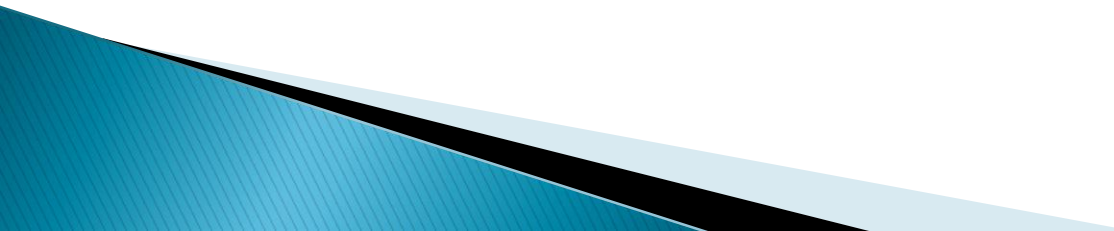
# Management

- Does oncologist feel it is appropriate to Rx px? If not palliate
- If yes...**Dexamethasone**
- Urgent discussion with ROH. **For consideration of surgery within 24 hrs**
- **Analgesia** and Spinal care: Nurse flat, log roll if suspicion unstable, **pressure care**
- If MRI shows spinal mets w/o MSCC may be a candidate for radiotherapy. Oncology team.  
**Analgesia**

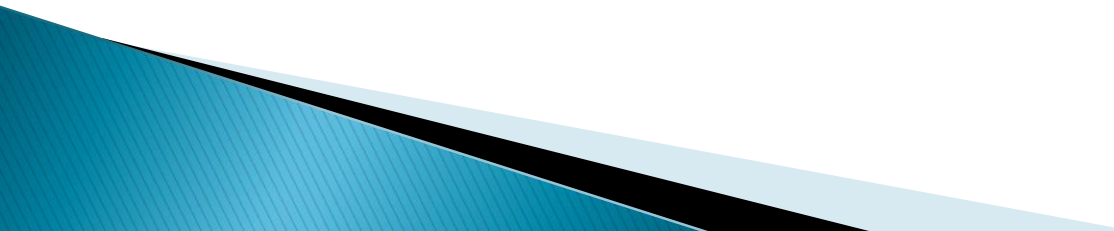
# Hypercalcaemia Case History

- 85 yrs F with known HTN, DM, COPD and breast cancer referred to medics “generally unwell”. Vomiting. More confused according to daughter
- Infection screen completed. WCC 16 CRP 35. Urine dip leuc +ve nitrate -ve bld + Prot ++. CXR nil acute
- Other Na 140 K 3.6 Ur 12.6 Cr 90 eGFR 80 Alb 30. AXR some faecal loading

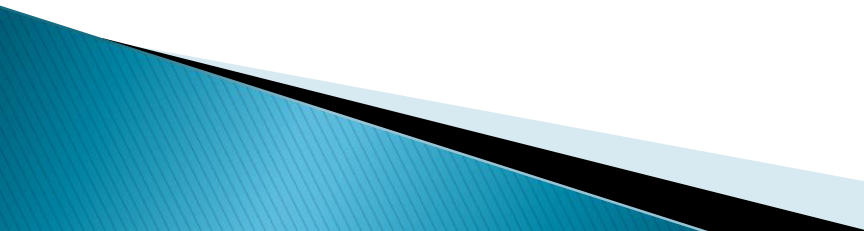
# PTWR

- ▶ Yellow/green vomit on bed sheets
  - ▶ Didn't seem to want to be disturbed– pulling covers over self
  - ▶ Not orientated in place
  - ▶ Dry mucous membranes
  - ▶ Chest clear. Abdo SNT
- 

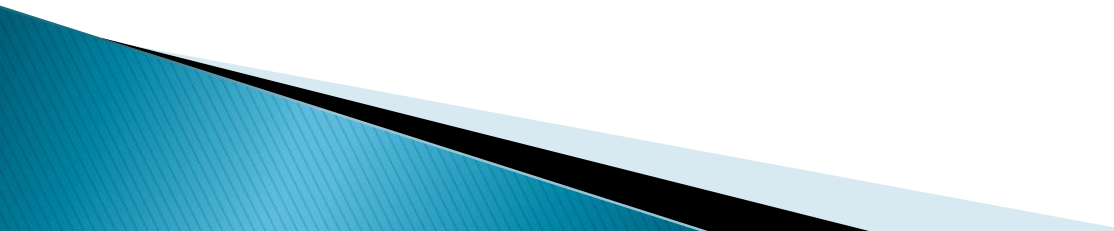
# Plan

- ▶ Antiemetics +/- NGT
  - ▶ Laxatives and enema/suppository
  - ▶ IVI
  - ▶ Rx suspected UTI
  - ▶ Collateral history
- 

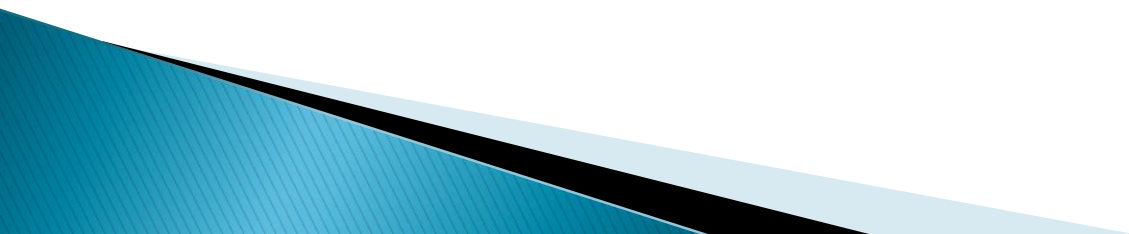
# Collateral History

- ▶ From daughter
  - ▶ Memory worsening over 18/12. Been to hospital and Rx for infections but never returned to base-line. Ongoing Rx for breast ca (hormonal) but still has lump. Family have safety concerns about living on own
  - ▶ Prompted review of calcium > 3.00 (adjusted)
- 

# Treatment

- ▶ IVI
  - ▶ Repeat  $\text{Ca}^{2+}$  level
  - ▶ Pamidronate
  - ▶ CT head
  - ▶ DNAR on the basis of frailty, cancer. Daughter in agreement
  - ▶ CoE ward
- 

# Questions?



# Summary

- ▶ Oncological emergency treatments
  - ▶ Evidence base/ Trust Guidelines
  - ▶ Plenty of ongoing patient exposure on AMU
- 