Oncological Emergencies

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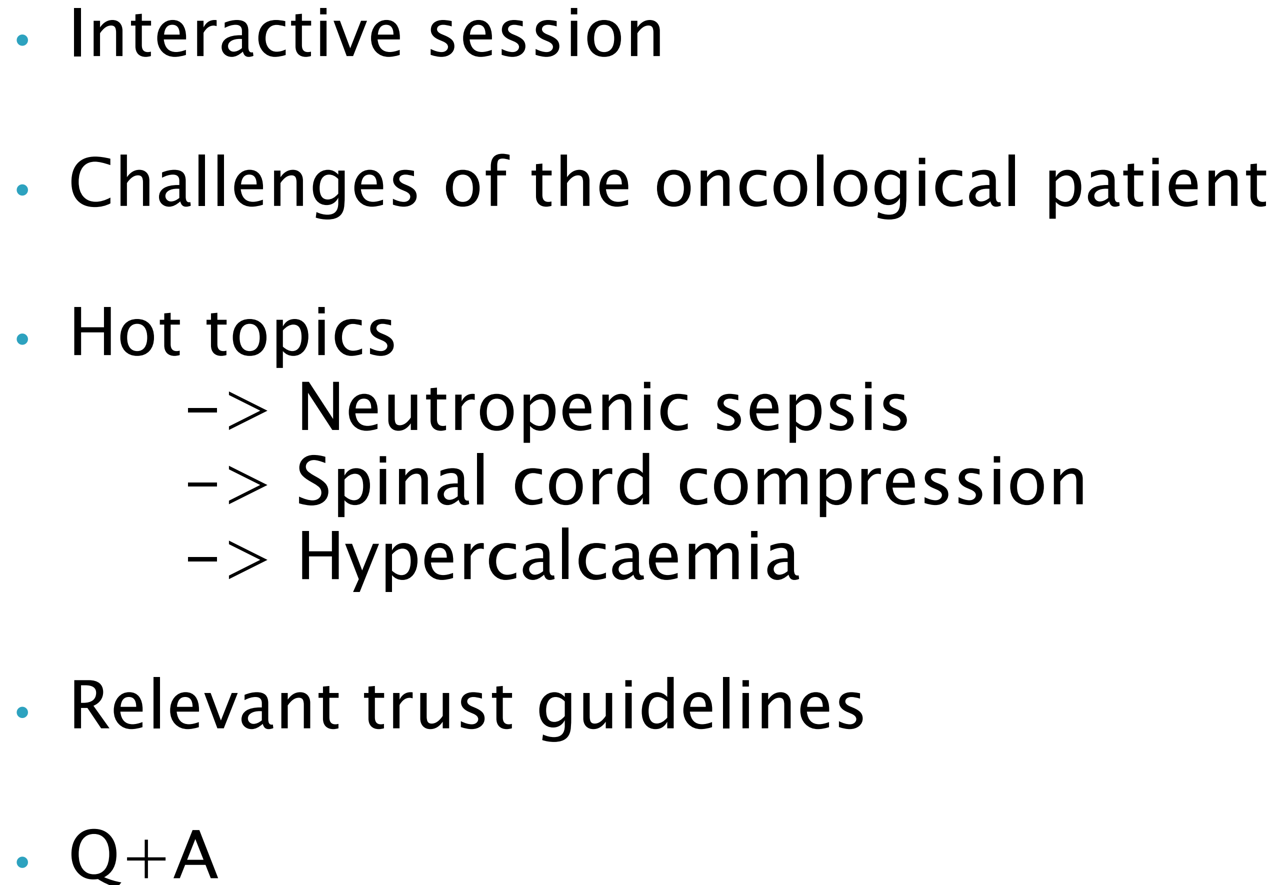
ST6 AIM & GIM

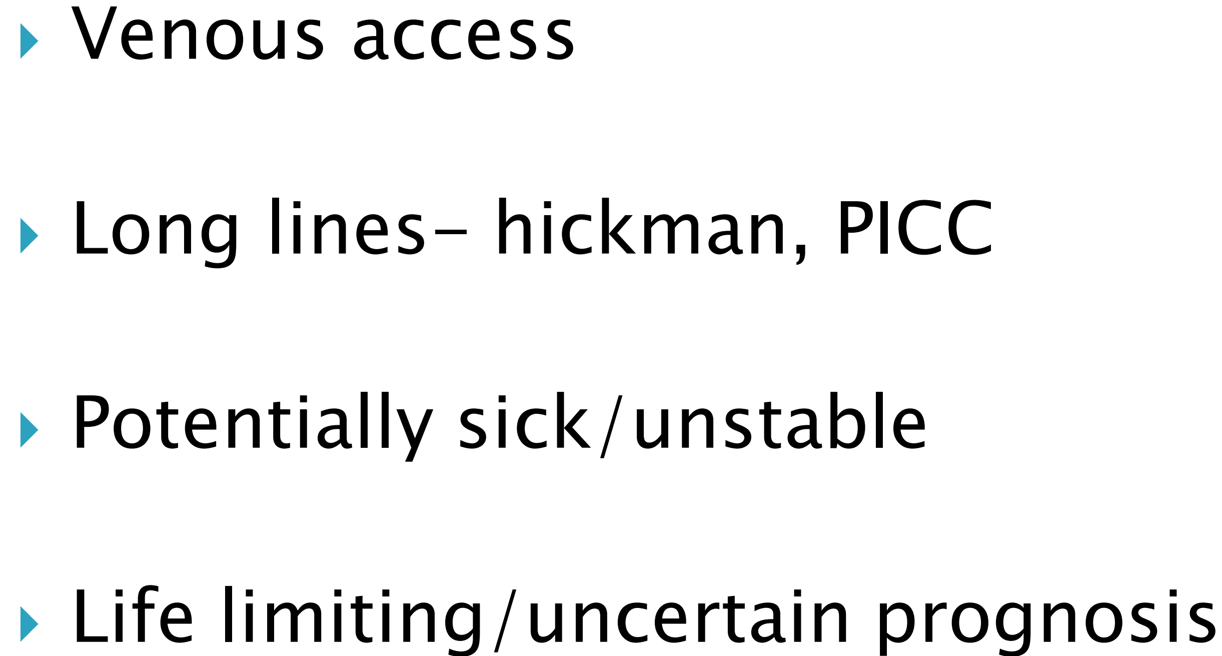
Talk Plan



Challenges

- Audience experiences?

My thoughts…



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

Neutropenic Sepsis

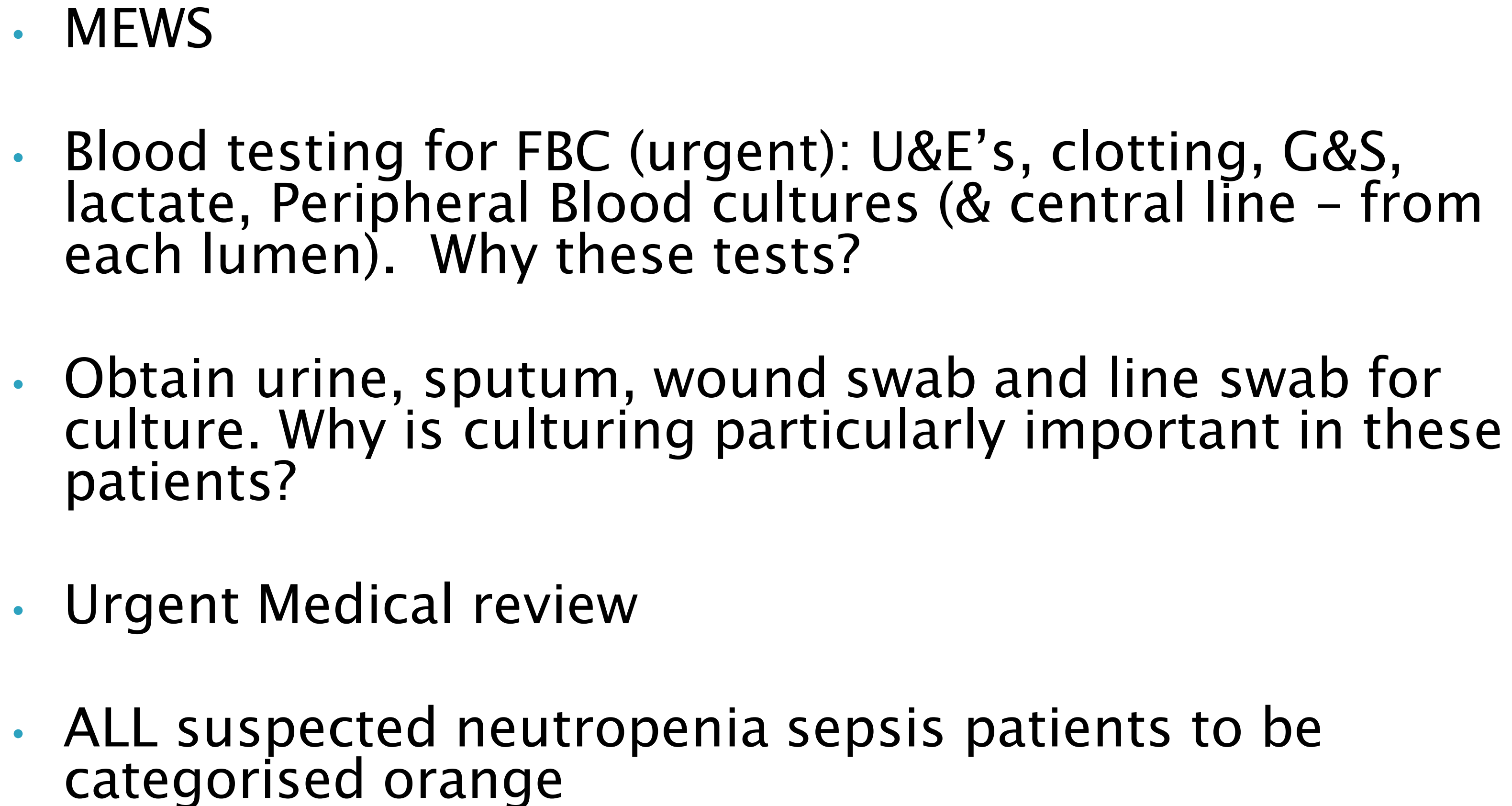
- What is it? *As per Trust* ***Guideline for the Management of Neutropenic Sepsis***

- Febrile Neutropenia is defined as a patient with a neutrophil count < 1.0 x 109/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?

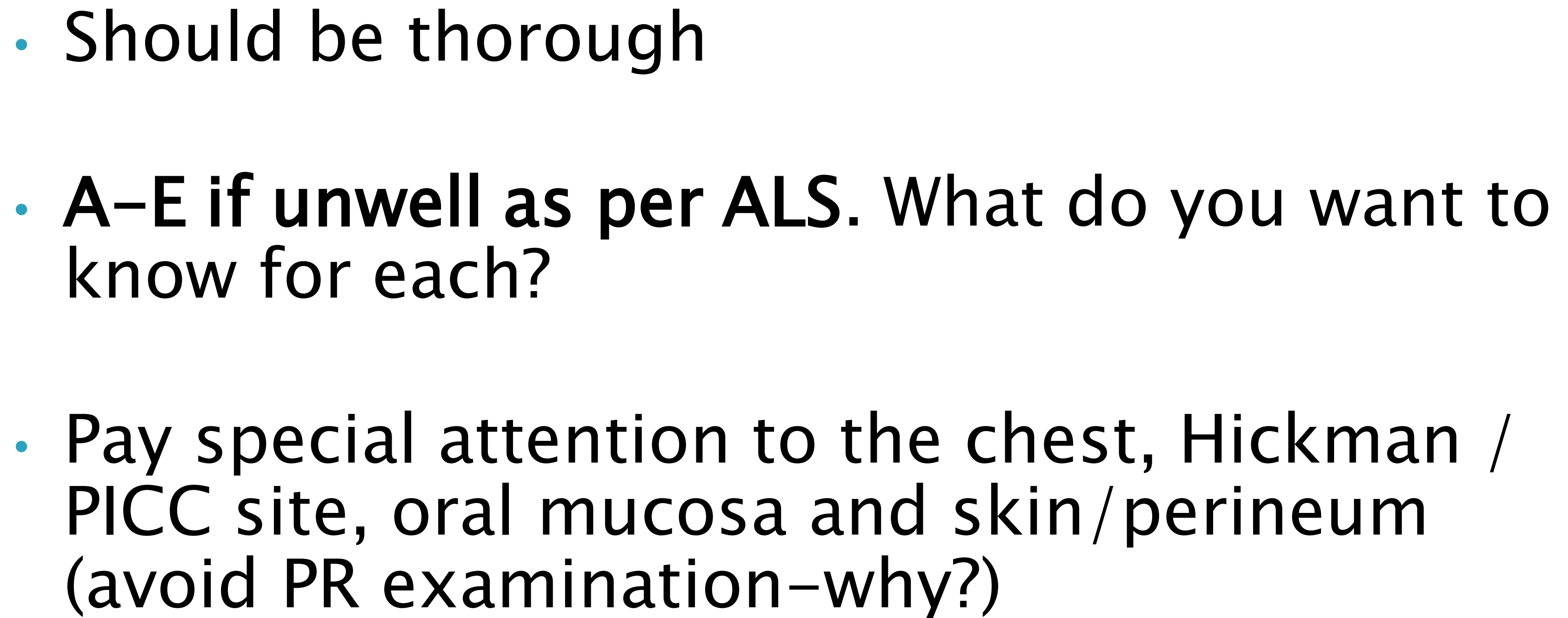
- Patients often educated during chemotherapy about what to look out for. May well have spoken to oncology specialist nurse

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



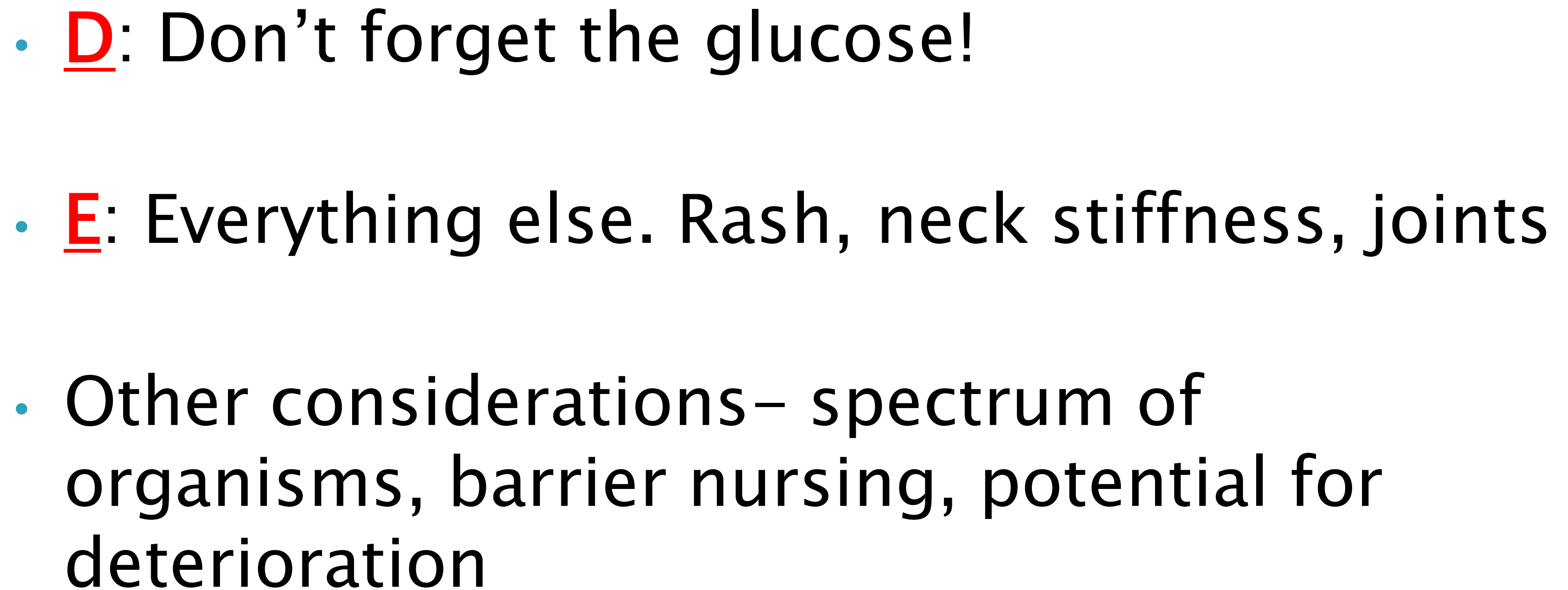
Treatment

- 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

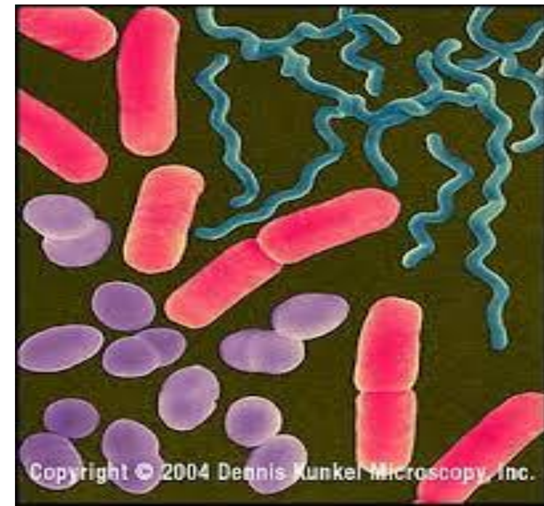
- If hypotensive – fluid challenge. **THINK IN TERMS OF 20mls/kg OF FLUID** i.e. for 80 kg man = 1600mls fluid
- VBG/ABG
- Fluid balance monitoring
- Consider a catheter
- Which patient with neutropenic sepsis do you think might need a catheter?



- 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

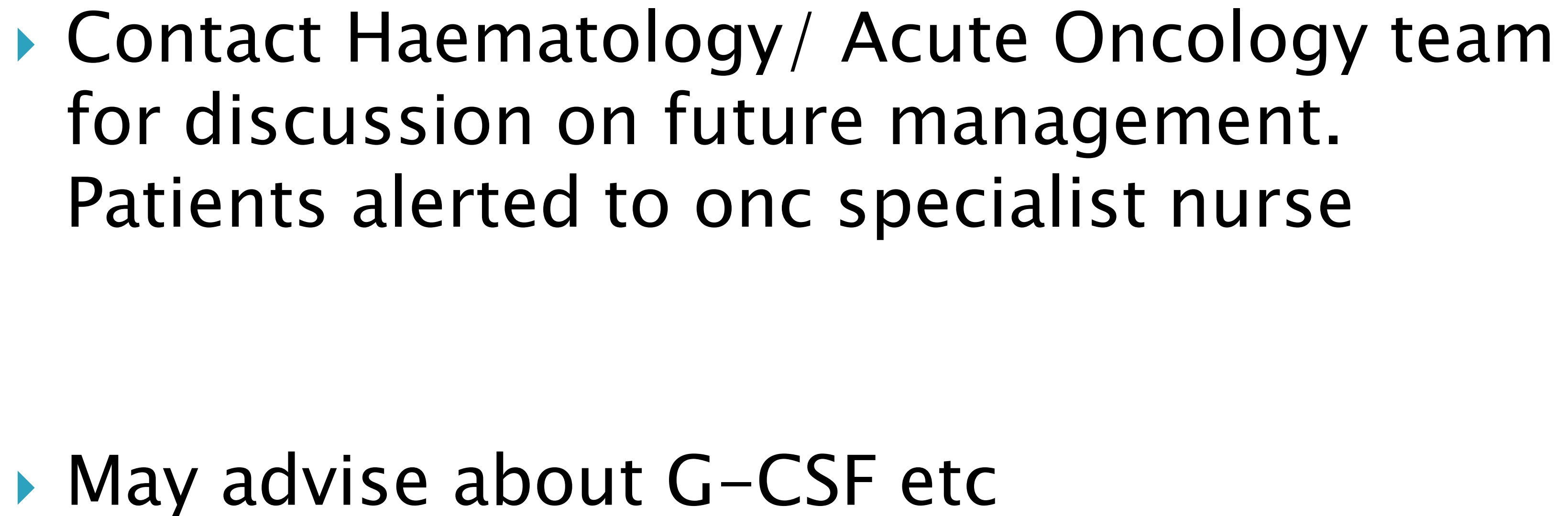
- **PATHWAY FOR LOW-RISK NEUTROPENIC SEPSIS / FEBRILE NEUTROPENIA–** available @ www.acutemedicinebhh.com

  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

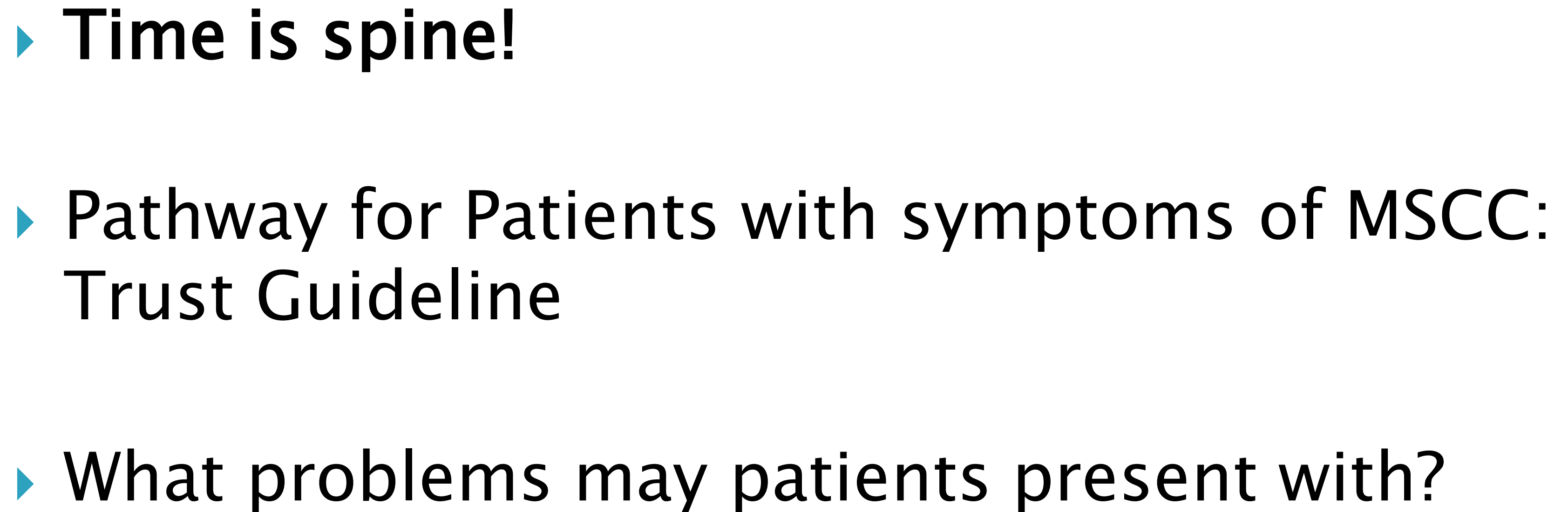
Ongoing Care



- 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



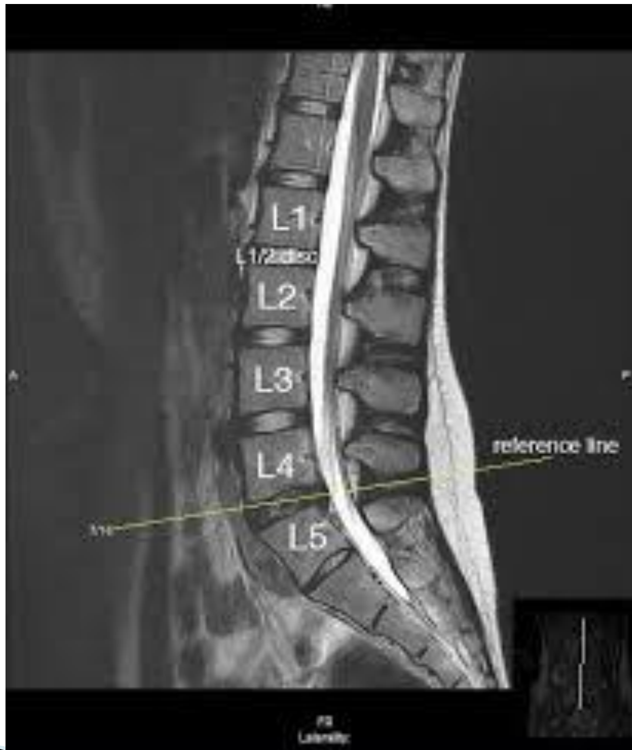
Red Flags

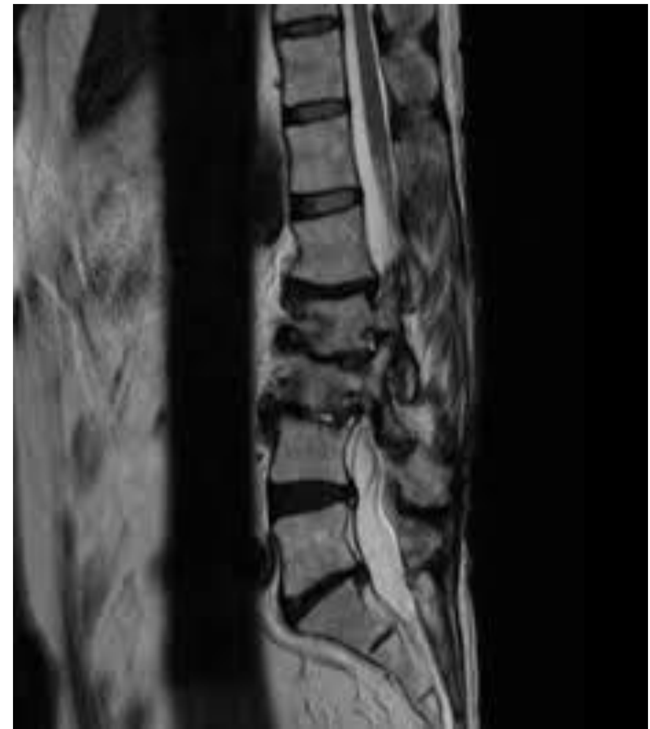
- Radicular pain
- Any limb weakness
- Difficulty in walking
- Sensory loss
- Bladder or bowel dysfunction

- 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





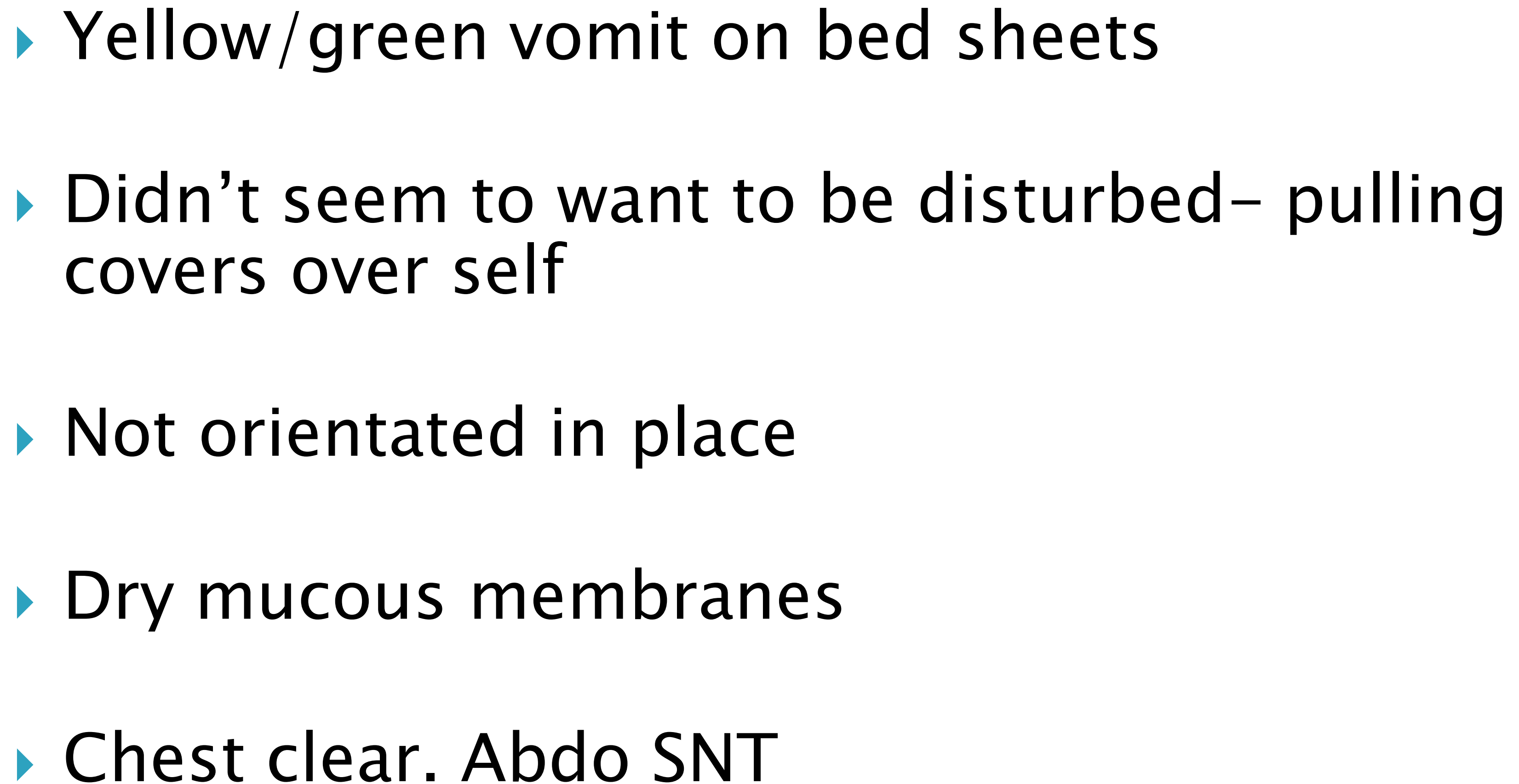
Management

- 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

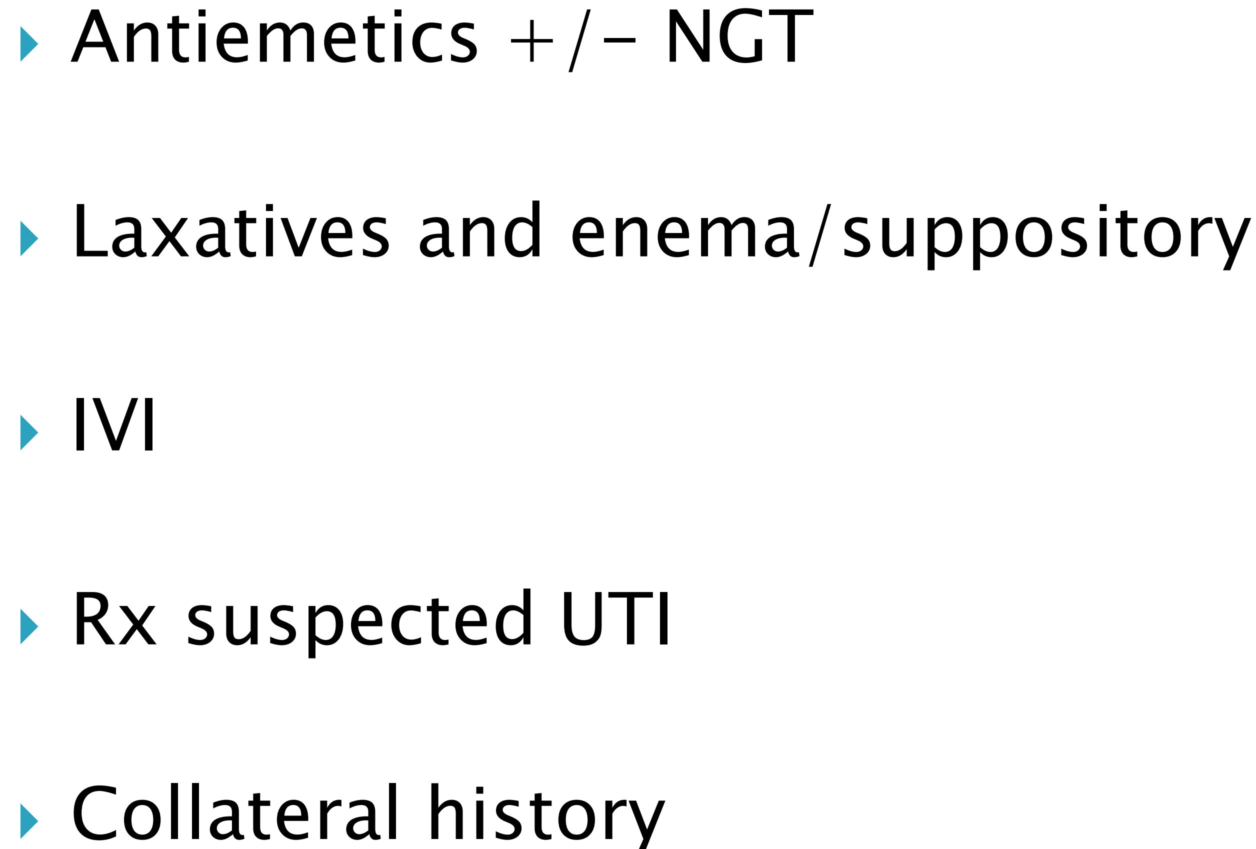
Hypercalcaemia Case History

- 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

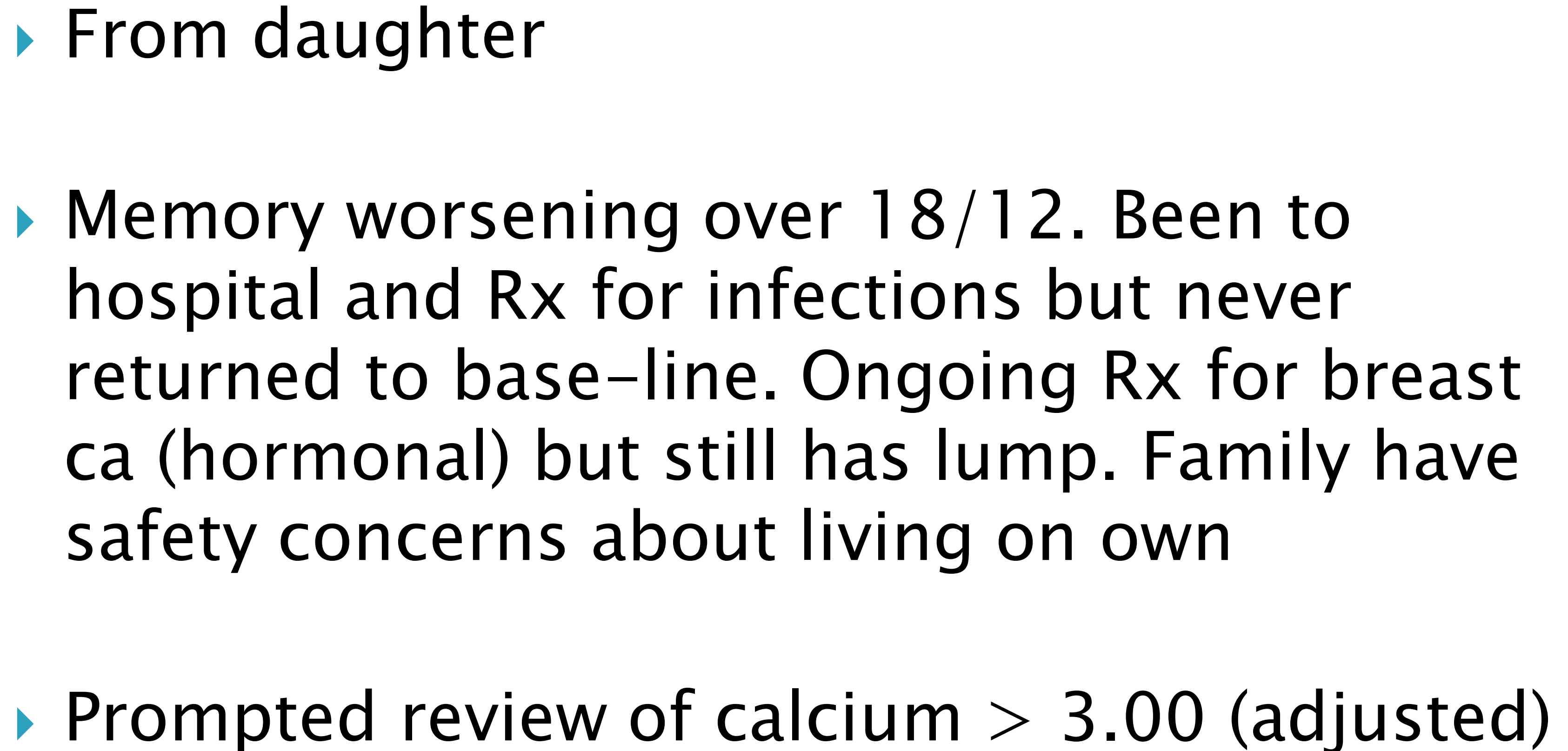
PTWR



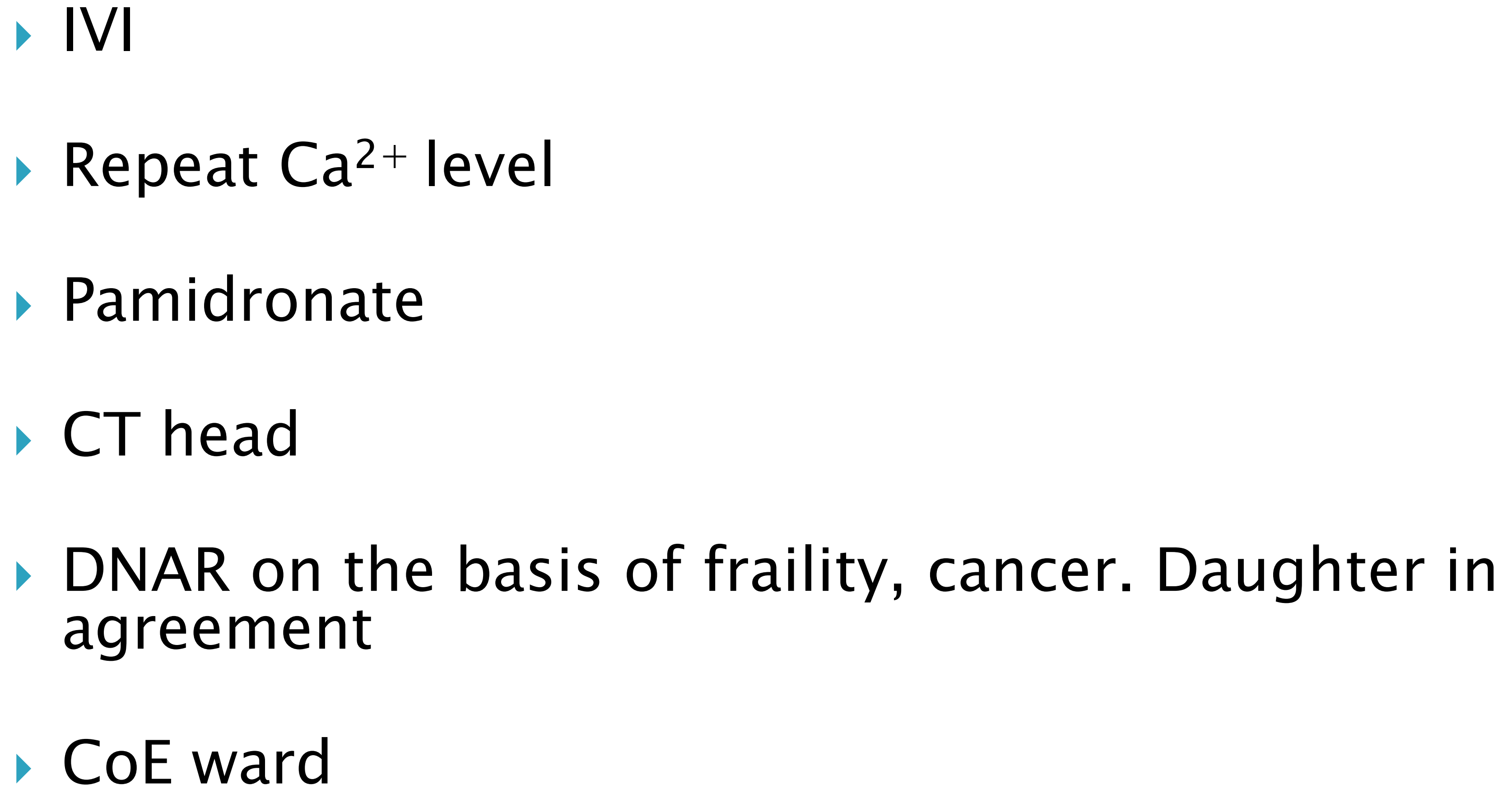
Plan



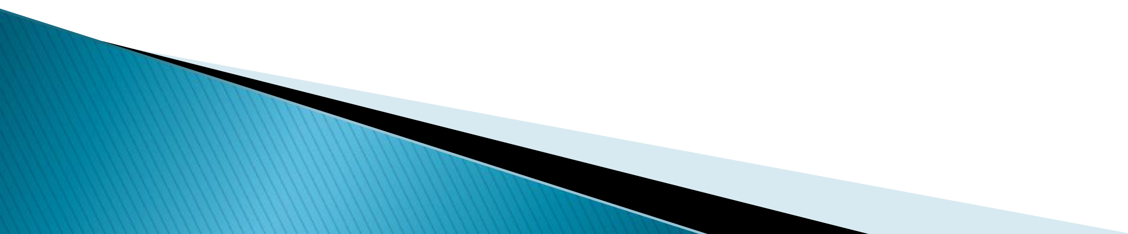
Collateral History



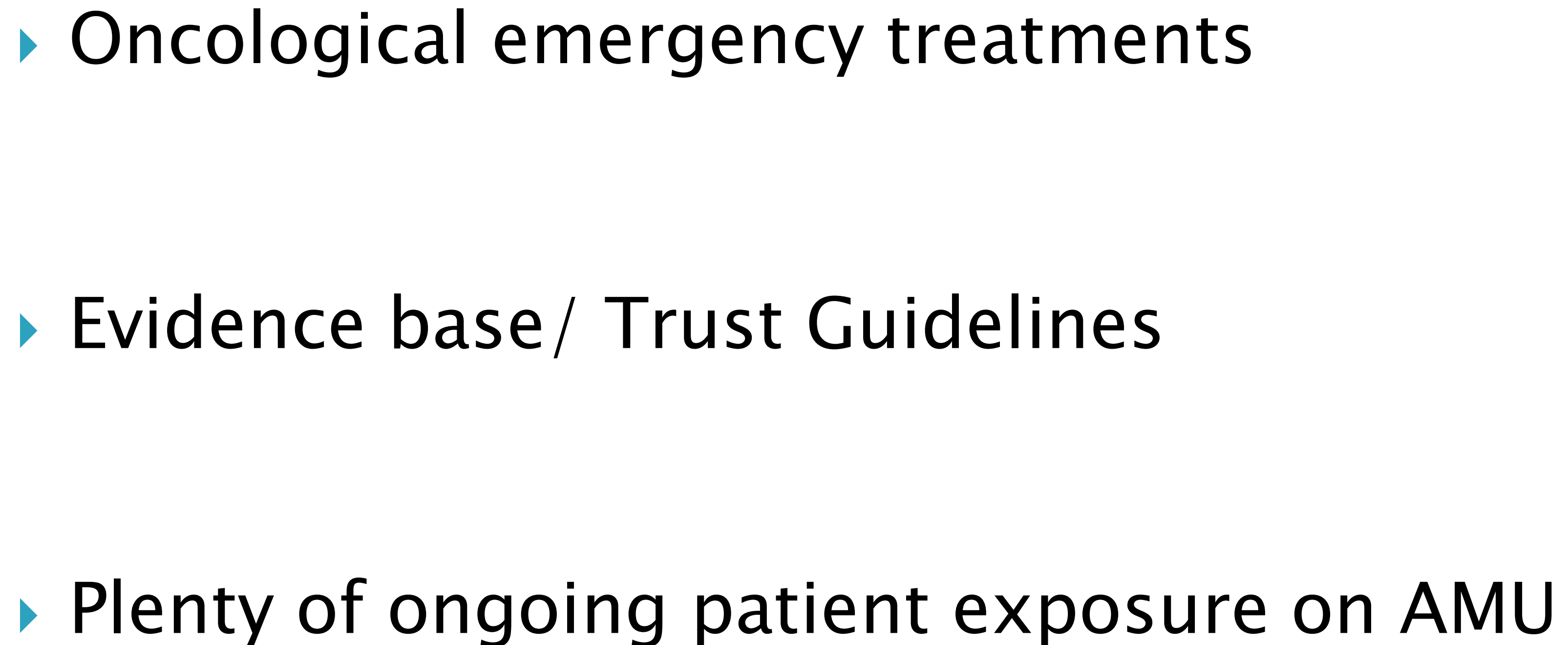
Treatment



Questions?



Summary



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