RADIOLOGY
AND ITS ROLE IN THE MDT

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OVERVIEW

- Diagnostic vs Interventional Radiology
- Cancer Assessment
  - Use of Imaging during Diagnosis and Treatment
- Issues for MDT co-ordinators
- The future?
DIAGNOSTIC VS INTERVENTION

Diagnostic
- X-ray – very cheap, low sensitivity
- Ultrasound – no radiation, cheap, variable
- CT – standard, but radiation
- MRI – no radiation, expensive, claustrophobia, time
- PET-CT – much higher radiation, but can give more functional info

Intervention
- Biopsy
- Tumour ablation
- Embolisation / chemo-embolisation
- Stents
CANCER ASSESSMENT

- Presentation
- Diagnostic test
- Risk stratification
- Follow up
PRESENTATION

- Symptoms vs Screening vs Incidental pickup

- Role of Imaging:
  - Screening
    - Lung cancer screening – lung CT
    - Bowel cancer screening – CT colonography
  - Incidental pickup
    - Lung nodule at the top of a CT abdomen
    - Renal mass on a routine abdominal ultrasound
DIAGNOSTIC TEST

- Usually requires tissue
  - Surgery / endoscopy
  - But increasingly image guided biopsy
    - CT
    - Ultrasound

- Sometimes it is obviously tumour on imaging
RISK STRATIFICATION

- Is this localised or spread?
  - Obvious spread on **imaging / examination**?
  - Other tests suggest spread even though not visible
    - **Histology** of high risk/grade disease
    - Abnormal **blood tests** (eg very high PSA, calcium)

- Are we aiming for cure or control?
  - Even nonlocalised disease may be cured
    - Seminoma
    - Haematological
FOLLOW UP

- If tumour removed / ablated
  - Looking for recurrence

- If given chemo/radiotherapy
  - Looking to see how it responds
MDT RADIOLOGY NEEDS

- Imaging review at MDT
  - To ensure correct diagnosis / stratification

- Need all relevant imaging
  - What is relevant?
  - IEP can be clunky, can fail

- Need all reports!
  - Takes 20-30 mins to report some scans
    - Full review not possible (would take days to prep), so need safety check
    - Review may highlight errors or other incidental findings which may not have been reported.
    - Need to check initial report.
  - May not have been reported locally.
MDT CO-ORDINATOR ISSUES

- Do we store images at central MDT site?
  - Red tape

- If we have a change in report, how do we feed back to local hospital?
  - Current ways
  - Radiology system updated?

- If jobs need to be done at another hospital, how do we follow up?
  - Book follow-up as safety?
THE FUTURE

- Imaging sharing
- Other info sharing
  - CENTRALISED DATABASE
  - (Why can’t imaging do this)