Abdominal Radiograph Interpretation

Demographics
- Patient: name, DOB, hospital number, age, sex
- Previous films

Radiograph detail
- Date
- Type (supine, upright, lateral decubitus)
- Adequacy
  - Area
  - Rotation
  - Penetration

Abnormalities
- Briefly mention obvious abnormalities
- Bowel
  - Small bowel
    - Identify by: pliae circularis/valvulae conniventes (around the whole circumference), central position
    - Should be <3cm in diameter (enlarged in obstruction)
  - Large bowel
    - Identify by: haustra (due to longitudinal and transverse muscularis), transverse bands don’t go all the way across (due to 3 longitudinal muscles), peripheral position, large size
    - Should be <6cm in diameter (enlarged in obstruction)
  - Faeces (mottled appearance)
  - Gas (normal in fundus and large bowel only): extra-luminal gas indicates perforation
  - Fluid levels seen in perforation/infection
- Other organs
  - Soft tissue shadows (may be seen)
    - Liver
    - Spleen
    - Kidneys
    - Gall bladder
    - Psoas shadow – lost in retroperitoneal inflammation or ascites
  - Calcification of pancreatic (chronic pancreatitis), abdominal aorta (atherosclerosis) or renal stones
- Bone (spine and pelvis): Pagets, metastasis, OA, vertebral fractures

To complete
- “To complete my analysis, I would examine previous films and determine the clinical history”
- “If there is any possibility of perforation, I would like an erect chest x-ray to look for air under the diaphragm”
- Summarise and note differentials

Common Abnormalities
- Large bowel obstruction: distension >6cm
- Small bowel obstruction: distension >3cm, no gas in large bowel, fluid levels if erect
- Volvulus
- Chronic pancreatitis: pancreatic calcification
- Urinary stones