



ultrasounds were undertaken. On further analysis, only 1/52 (1.9%) had an abnormality. We had looked carefully at the scans performed for the 75 patients who presented with UTI's by looking through the request forms. It was clear that there were only 3 requests from the 52 found that were adhering to the NICE guidance.

These results show a low true positive rate. We proposed that an accurate history coupled with knowledge of the NICE guidelines for investigation of UTI could safely lead to a decrease in ultrasound investigations of children. This will not only relieve the pressures of scanning, but will inevitably reduce costs and valuable resources for the hospital.

P114 Gastrointestinal tract obstruction in the neonate - a pictorial review

[Cheng Fang](#); [Pamela Allen](#)

King's College Hospital NHS Foundation Trust

Aims/objectives: We present an overview of the key radiological features of various causes of gastrointestinal tract obstruction in a neonate. We aim to raise awareness to assist rapid diagnosis of these conditions which may lead to significant complications if undiagnosed in the new born period.

Content: This review contains a range of cases of gastrointestinal obstruction from the oesophagus to the anus. We include common cases such as pyloric stenosis, malrotation and Hirschsprung's disease as well as rare atresias. The key diagnostic features of the initial imaging will be highlighted through plain radiograph, ultrasound and fluoroscopic studies.

Relevance and impact: Unrecognized or delayed diagnosis of gastrointestinal obstruction may lead to rapid deterioration in neonates, with narrow physiological reserves, leading to increased complications, morbidity and mortality. Clinical history and examination are helpful but often non-specific and diagnostic imaging becomes the cornerstone in making an early definitive diagnosis.

Outcomes: This review will demonstrate key radiological signs for diagnosing various causes for gastrointestinal tract obstruction in neonates. Correct interpretation of initial imaging allows timely referral for surgical management or prompt further investigations to aid diagnosis and avoid unnecessary morbidity and mortality.

Discussion: Correct diagnosis of the cause of gastrointestinal obstruction in neonates remains challenging. There is a short time window to avoid complications and often the initial interpretation of the plain radiograph falls onto a non-paediatric trained radiologist. We aim to improve confidence of the DGH radiologists to allow prompt diagnosis and referral of cases of neonatal gastrointestinal obstruction.

Clinical: Multisystem disorders

P115 Imaging features of abdominal tuberculosis

[John Adu](#); [Huai Ming Phen](#); [Khawaja Shahabuddin](#)

Barts Health NHS Trust

Aims: Abdominal tuberculosis mimics many conditions both clinically and radiologically, and can result in significant morbidity. Familiarity with the imaging features and complications of the disease is essential in order to allow early diagnosis, initiation of appropriate treatment and to ensure a favourable outcome. The aim of this poster is to provide a pictorial review of the imaging findings of abdominal TB and to explore the features that will help the reporting radiologist to differentiate this condition from those of its mimics.

Content: We provide a pictorial review of ultrasound, CT and MRI appearances of:

- Tuberculous lymphadenitis
- Urinary tract tuberculosis
- Tuberculous peritonitis
- Gastrointestinal tract tuberculosis
- Hepatosplenic tuberculosis

- Tuberculosis of the biliary tract
- Pancreatic tuberculosis
- Adrenal tuberculosis.

Relevance: In London, the incidence of TB continues to climb. Specifically, in East London (where our hospital is based) there are up 119 cases per 100,000 people each year; higher than many African countries. In this context, TB must be considered in the differential diagnosis of patients who present with abdominal symptoms.

Discussion: Abdominal tuberculosis is difficult to diagnose due to its varied presentation. Although there are no pathognomonic imaging findings, several characteristic imaging features can be seen that are highly suggestive of TB. A high index of suspicion and recognition of the common imaging findings can lead to an early diagnosis and reduction in the long-term morbidity and mortality. Familiarisation with the characteristic features TB can facilitate differentiation of TB from other important inflammatory and neoplastic conditions.

P116 Audit on the current use of imaging in diagnosis of multiple myeloma

[Nathan Gupta¹](#); [Nadya Jabbar²](#); [Dina Hikmat²](#); [Edu Anosike³](#); [Nitin Rao²](#)

Wirral University Teaching Hospital; Warrington and Halton Group of Hospitals¹; Wirral University Teaching Hospital NHS Foundation Trust²; Warrington and Halton Hospitals NHS Foundation Trust³

Introduction: Skeletal survey (SS) remains the recommended modality of imaging for confirmation of multiple myeloma (MM) according to British Committee for Standards in Haematology (BCSH) 2014 guidelines. SS has poor sensitivity for the detection of osteolytic lesions and cannot detect extramedullary lesions, focal bone marrow involvement or measure response to therapy. MRI, CT and PET/CT can give additional information in MM.

Aims: To assess adherence to current BCSH guidelines for imaging in MM.

Methods: Retrospective audit of patients who underwent skeletal survey for suspected myeloma between 27/08/13 and 30/12/13.

Results: There were 51 patients (age range 44 to 100 years) in our audit. 39 patients were suspected of MM and 12 patients were known to have monoclonal gammopathy of unknown significance (MGUS). 7 patients had an incomplete SS. 7 patients showed lytic lesions on SS compatible with MM. 14 patients had indeterminate bony lesions and 25 patients had no bony lesions.

Conclusion: There was good adherence to current BCSH guidelines in our patient group. However, despite the poor sensitivity of SS, only 2 patients with indeterminate lesions had further imaging with MRI/CT for lesion characterization as recommended by the guidelines. SS still continues to be the recommended initial imaging for radiological diagnosis of MM. Other imaging modalities should be used where the SS is equivocal and/or when complications arise.

References:

1. Healy et al, BMR, doi:10.1155/2011/583439
2. Esther et al, Leuk Lymphoma. 2011 September 52(9)

P117 Heterotaxy

[Fiona Caswell](#); [Georgia Priona](#)

Aberdeen Royal Infirmary

Aims/objectives: The word heterotaxy is derived from Greek from heteros (ἕτερος=different) and taxis (τάξις=arrangement). It refers to abnormality in the usual arrangement of organs with regards to the right-left axis (Right-left isomerism) of the body. There are different forms of heterotaxy syndromes that can be placed under the umbrella of the cardiosplenic syndromes, a more pathophysiological approach to this magical phenomenon. There is a high association with complex congenital cardiac abnormalities, especially with the asplenia subtype, which can have a high mortality rate. Many systems can be affected in these complex syndromes and as such, careful evaluation is required.



Relevance/impact: We present two different cases of heterotaxy syndrome in order to demonstrate many of the radiological findings accompanied by tables explaining potential radiological findings.

Outcomes: This presentation will make you more clear about the nomenclature used and give an overview of the radiological appearances as well as the identification of patients at risk of fatal complications from the related cardiac, immune and gastrointestinal pathology.

Discussion: Although complex heterotaxy syndromes can be related to high mortality and morbidity. It is the radiologists duty and also of paramount importance to be aware of the heterotaxy presentations and the increased risk of congenital heart disease, immune deficiency (due to splenic absence) and catastrophic volvulus with malrotation.

P118 Paget disease: A pictorial review of its typical imaging characteristics and potential complications in our practice

[Saman Zaman¹](#); [Jenn Wong¹](#); [Elliot Rees²](#); [Catriona Reid¹](#); [Maria Johnson¹](#); [Ajay Sahu¹](#)

Ealing Hospital, London Northwest Healthcare NHS Trust¹; Plymouth Hospitals NHS Trust²

Introduction: Paget disease of the bone is a chronic bone disorder characterised by excessive abnormal bone remodelling. It is a common disorder affecting approximately 4% of patients over 40 years of age and 11% over the age of 80. The radiologist plays a pivotal role in the identification of disease, monitoring of progression, and early recognition of its complications.

Objectives: Our aim is to review imaging findings, natural history and complications of Paget disease. As only one-fourth of the patients are symptomatic at the time of detection of the disease, this is usually diagnosed incidentally. Polyostotic disease is more common than the monostotic type. The most frequent sites of involvement are spine, pelvis, skull and proximal long bones. We expect the radiologists to identify the disease and assess its stage-wise progression including complications.

Presentation and imaging findings: Plain films, CT, MRI, and bone scintigraphy images demonstrating varying manifestations of Paget disease will be provided. Cases showing lytic (incipient or osteoclastic activity), mixed (active osteoblastic and osteoclastic activity) and sclerotic/blastic (late inactive) will be demonstrated. We endeavour to illustrate typical appearances such as osteoporosis circumscripta, cotton wool appearance, diploic widening, picture frame and squaring of vertebra, and asymmetric enlargement of the bones. Different radiographic examples of potential complications will include osseous deformity, bowing deformities, kyphosis, spinal stenosis, pathologic fractures, basilar impression, and sarcomatous degeneration.

Conclusion: Knowledge of the key imaging findings including potential complications is important to providing an accurate interpretation of patients with Paget disease.

Clinical: Intervention and trauma

P119 The utility of CT scanning for hip fractures from the Emergency Department

[Noor Dawn Assaf](#); [Anthony George](#); [Nicholas Ridley](#)

Great Western Hospital

Introduction: CT is frequently used as follow up imaging to further investigate radiologically occult hip and pelvic fractures. The aim of this study is determine the value of Computed Tomography (CT) of the hips and pelvis in assessing for the presence of these occult fractures.

Methods: Retrospective data was collected from the scans and reports of CTs and X-ray of the hips and pelvises requested by the Emergency Department between 20/01/2013 and 19/11/2014. A total of 100 cases were reviewed.

Results: 44 CTs were positive, the most common fractures identified were those of the pubic rami (17), acetabulum (8), neck of femur (8) and greater trochanter (7). Out of the 44 patients with fractures, 27 (61%) had an X-ray