



Method: All lung cancer diagnoses for 2016 were obtained from the cancer registry. All CXR's performed in the year prior to diagnosis were reviewed using the RCR audit toolkit.³ Where discordant reports were identified, radiographs and other relevant imaging were re-examined and classified.

Results: A total of 241 CXR's were performed for 165 patients. 21 (15%) of patients had no CXR prior to diagnosis. 5 were diagnosed out of area. Of these 241 radiographs, 56 (23%) were reported as normal. The rest were reported as abnormal, either as a likely cancer or for further follow up. On review, 17 (7%) were felt to demonstrate visible lesions that had not been reported. 7 (3%) showed a subtle abnormality that could only be reported in retrospect. 32 (13%) were occult on CXR even with access to subsequent imaging. We show a selection of cases that were missed initially, but on review were visible. These cases are an invaluable learning resource and act as a reminder of the 'review areas'.

Conclusion: Review of previous films where there has been a diagnosis of malignancy is an important tool in improving quality and reducing future error.

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CARDIAC & VASCULAR

P089 Clinical relevance of incidental findings in lower limb CT angiograms

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Introduction: The aim of this study is to report the incidence and the clinical relevance of extravascular incidental findings (EVIF) in patients who had lower limb CTA.

Method: Consecutive lower limb CT angiograms performed between August 2015 and August 2017 were retrospectively reviewed. The clinical relevance of the non-vascular findings were categorized into A, B or C using guideline recommendations where Category A represents incidental findings of immediate clinical relevance such as suspicion of malignancy, Category B represents findings that may be clinically relevant but most probably benign and Category C represented purely incidental findings of no clinical significance.

Results: A total of 1304 lower limb CTAs performed during the 2 years study period. 84 cases were excluded for missing reports. Mean age of 66± 14.2 years (range 8-98 years). A total of 1635 extravascular incidental findings were reported in 813 patients. Of these, 174 EVIFs (10.6%) were found in the chest, 1236 (75.6%) in the abdomen, 87 (5.3%) in the musculoskeletal system and 138 (8.4%) reported as 'other'. A total of 111 EVIFs (6.8 %) were Category A, 405 EVIFs (24.8%) of Category B and the remaining majority 1119 EVIFs (68.4%) were of Category C. No incidental findings were seen in 407 patients (27.5 %).

Conclusion: The results confirms the importance of Radiology led reports of CTAs as they can lead to detection of serious pathology which would otherwise be missed or diagnosed late.

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P090 The incidence and clinical relevance of extravascular incidental findings in upper limb CT angiograms

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Introduction: CTA has been the gold standard in assessing the vascular system for pathology. It also has the invaluable advantage of imaging the extravascular structures allowing the detection of incidental findings. The aim of this study is to report the incidence and the clinical relevance of extravascular incidental findings (EVIF) in patients who had upper limb CTA.

Methods: Consecutive upper limb CT angiograms performed between August 2015 and August 2017 were included. The clinical relevance of the non-vascular findings were categorized into A, B or C. Category A represents incidental findings of immediate clinical relevance, Category B represents findings that may be clinically relevant however most probably will be benign, whereas Category C findings were purely incidental findings of no clinical significance.

Results: Seventy-nine upper limb CTAs were performed during the 2 years study period. Five were excluded for missing images. A total of 153 EVIFs were reported in 52 patients (70.3%). A total of 12 EVIFs (7.8%) seen in 11 patients were of Category A, 50 EVIFs (32.3%) seen in 20 patients of Category B and the remaining majority 91 EVIFs (59.5%) seen in 21 patients were of Category C. No incidental findings were seen in 22 patients (29.7%).



Conclusion: Our results signifies the importance of reporting both vascular and extravascular findings in CTAs, especially in this patient group of higher risk as they do lead to the detection of serious life threatening pathology which would otherwise be missed or diagnosed late.

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P091 Geniculate artery embolisation for recurrent knee haemarthrosis post total knee replacement: Experience so far in a busy DGH and review of the literature

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Geniculate artery embolisation is a growing treatment for patients who have recurrent knee haemarthrosis following an uneventful total knee replacement. The procedure was first published in 2001 and since then there have been a number of small series published showing successful outcomes in a high percentage of patients who would otherwise have either supportive treatment or potentially revision surgery. Embolisation for recurrent joint related bleeding has been well documented for patients with haemophilia but post knee replacement it is not common practice and patients are rarely offered this treatment option. This is either due to lack of local expertise, or more commonly, due to lack of awareness of the procedure. We present our local experience of this procedure with details of the procedure, the technical challenges faced, follow-up and outcomes. We also use this opportunity to present a pictorial review of the procedure and review of the most up to date literature.

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P092 May-Thurner syndrome: A rare cause of lower limb DVT

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Background: May-Thurner syndrome is an uncommon cause of unilateral left lower limb deep vein thrombosis (DVT). Symptoms and complication of this syndrome are due to the chronic compression of the left common iliac vein by the right common iliac artery^[1].

Purpose: To highlight that correlation between clinical history and physical examination with radiographic findings is crucial in making a diagnosis. May-Thurner syndrome should be considered as one of the differential diagnoses in patients presenting with unilateral left lower limb DVT especially if they do not have any risk factors to develop venous thrombosis.

Summary of poster: We describe here a case of a 24-year-old lady who presented to hospital with a sudden onset progressive swelling of the proximal left lower limb. She had no risk factors for DVT. A Doppler ultrasound was performed and confirmed the presence of an extensive left lower limb DVT from the left external iliac vein up to the distal inferior vena cava. A cross-sectional imaging of the abdomen and pelvis was performed to exclude any mass, which might have caused this extensive DVT.

Correlation between radiographic features and clinical history suggested a diagnosis of May-Thurner syndrome that was later confirmed on angiographic venogram. The patient was thrombolysed and subsequently had a stent inserted into the proximal left common iliac vein to prevent reoccurrence.

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P093 The relationship between the presence of reflux and disease-specific quality of life measures in patients with chronic venous disease

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Background: Chronic venous disease (CVD) is a highly prevalent condition. Venous duplex ultrasound (DUS) is the gold standard assessment tool in the investigation of CVD. Although quality of life correlates with severity of disease, the relationship with the presence of reflux is less well defined^[1].

Aim: The aim of this study was to compare objective duplex-derived outcomes with disease-specific quality of life, employing the Aberdeen Varicose Vein Questionnaire (AVVQ), in patients presenting with CVD.

Method: Patients presenting with symptomatic CVD in a single unit were prospectively recruited and imaged with colour duplex ultrasonography of the symptomatic lower limb(s). Reflux constituted retrograde flow of > 0.5 seconds in the truncal veins. The AVVQ of the most symptomatic leg was recorded at presentation. Control subjects were similarly evaluated.

Results: 420 patients were included (female n=271) with mean age 50.52 years (range 18-90 years). 105 control subjects were evaluated. The AVVQ showed a weak positive correlation with maximal vein diameter on duplex ultrasound (Spearman



coefficient 0.102; $P=0.04$). No significant correlations were found between AVVQ and the number of trunks affected (Spearman coefficient 0.085; $P=0.290$), or age (Spearman coefficient 0.082; $P=0.092$).

Conclusion: In a large cohort of CVD patients undergoing duplex ultrasound, no correlation between AVVQ and anatomical reflux was found, suggesting the presence of reflux alone is a poor surrogate marker for varicose vein patients' quality of life. Maximal vein diameter has limited utility. It is important to employ disease-specific quality of life tools in addition to imaging results.

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P094 Adaptive technique - congenital cardiac MRI challenges

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Background: Over the past 20 years MRI has become increasingly important in the on-going management of congenital heart disease within the UK. The ability to image anomalies and disease for surgical planning or ongoing surveillance in greater detail, alongside Echocardiography, has reduced the incidence of open heart surgery and thereby improved outcomes and quality of life for patients. MRI is more widely accessible within the UK than ever before with mobile services providing a crucial role in increasing capacity and outreach services.

Purpose: This poster aims to demonstrate in detail the adaptive techniques used by Cardiac MRI Radiographers at InHealth to obtain high quality diagnostic images in patients with rare congenital disease and post-surgical intervention. These cases include patients who have undergone Senning and Mustard procedures for transposition of the great arteries, Tetralogy of Fallot repair, Fontan procedures and coarctation of the aorta repair. Anatomy can vary widely in patients with congenital heart disease, therefore the case reviews will be used to illustrate some of the common variants seen and how these may be approached technically to achieve desired image appearances for diagnosis and assessment to be made.

Summary: Not only must radiographers navigate the differing anatomical structures, they must also be conversant with related pathologies, adapting technique accordingly to ensure diagnostic efficacy. Although this can be technically challenging, it also proves to be incredibly rewarding.

GI & HEPATOBILIARY

P095 The evaluation of compliance with iRefer guidelines for abdominal imaging and the impact of the normal abdominal radiograph on the clinical confidence and decision making of emergency clinicians

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Introduction: Attendance of adult patients to the Emergency Department (ED) with acute abdominal pain is a frequent event. Abdominal radiography (AXR) is commonly the first line of investigation but previous studies have suggested that the AXR has no place in assessing acute abdominal pain because of its low diagnostic yield and limited contribution to direct clinical decision making. However, no evaluation of the impact of a negative AXR on the clinical confidence and decision making of emergency clinicians has been undertaken. This study fills this gap.

Method: A self-designed paper questionnaire was distributed to medical clinicians on ED placement at a single NHS trust in Dorset. The survey sought to explore the impact of the negative AXR on clinical confidence and decision making and compliance with iRefer guidelines for referring to alternative imaging modalities (ultrasound and computed tomography) should the option to refer for AXR be removed.

Results: A total of 28 ($n=28/41;68.3\%$) completed questionnaires were returned. Most clinicians ($n=18/28; 64.3\%$) indicated that the negative AXR had little impact on their clinical decision making although a small majority ($n=10/18; 55.6\%$) acknowledged it provided greater clinical confidence in their decision making. Variable compliance with iRefer guidelines for referral to ultrasound and computed tomography was noted.

Conclusion: Whilst the negative AXR did not impact on the clinical decision making of most ED clinicians it did increase clinical confidence. Consequently, the AXR should remain a referral option in the workup for adult patients presenting with acute abdominal pain to the emergency department.

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