

### P-086 Evaluation of inguinal region hernias on CT

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**Aim/purpose:** 1. A pictorial review of cases of direct, indirect and femoral hernias and demonstrate their anatomic differences. 2. Aims to demonstrate key anatomic structures both on illustrated drawings and on axial CT that aid in radiological diagnosis.

**Content:** 1. Pictorial review of evaluation of inguinal hernias on CT, with relevant illustrated anatomy and key radiological features that aid in distinguishing direct, indirect and femoral hernias. 2. Discuss vascular road map - a 3 step algorithm related to inferior epigastric artery and femoral vein aiding in diagnosis of inguinal hernias. To discuss pubic tubercle as an anatomical land mark and use of lateral crescent sign in diagnosis of groin hernias.

**Relevance:** Differentiation of direct inguinal hernias, indirect inguinal hernias and femoral hernias is often difficult at clinical examination and presents challenges even on diagnostic imaging.

**Conclusion:** Familiarity and through understanding of the anatomical relationships in inguinal region on axial CT is critical to the diagnosis of differentiation of the three main types of hernias in this region. Radiologists ability to differentiate direct inguinal hernia from higher risk indirect and femoral hernias aids in prompt diagnosis and appropriate management.

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### P-087 Contrast dose by patient weight in abdominal CT scanning: An evaluation of current practice

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**Purpose:** In our institution, when a portal venous phase CT scan of the abdomen is performed, a set protocol is utilised regardless of patient size (98ml of iodinated contrast delivered at 3ml/second with the patient being scanned at 60 seconds post administration at 100 kV). This results in a wide spectrum of vascular and solid organ enhancement due to variation in patient weight. The aim of this study was to objectively assess the correlation between enhancement patterns and contrast dose by unit weight.

**Methods and materials:** 50 consecutive cases were collected prospectively. Inclusion criteria were portal venous phase scans of the abdomen (with or without chest scanning) that utilised the department's standard protocol. Hounsfield units were measured at the portal vein in the porta hepatis, the mid abdominal aorta and the splenic parenchyma. These values were plotted against contrast dose per unit weight.

**Results:** The Hounsfield units in all three areas showed strong positive correlations with contrast dose per unit weight. (Pearsons correlation coefficients: Portal vein = 0.58 aorta = 0.55 Spleen = 0.59). All of these correlations were statistically significant ( $p < 0.05$ ). In addition to this, when images with data points closest to the portal venous trend line were presented to a group of radiology consultants, there was an objective increase in the quality of the image.

**Conclusion:** This data has shown that enhancement patterns are strongly related to contrast dose by patient weight and a fixed dose strategy fails to produce consistent image quality.

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### P-088 Abdominal CT: A patient weight-based approach to contrast dose

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**Purpose:** In a previous study, our institution has showed that utilisation of a standard contrast protocol for portal venous abdominal CT scanning (ie. 98ml of iodinated contrast delivered at 3mls/second with the patient being scanned at 60 seconds post administration at 100 kV) without consideration of patient weight, resulted in a wide spectrum of vascular and solid organ enhancement since each patient had a different contrast dose per unit weight. The present study aims to assess the effect of a patient weight-based approach to contrast dose with a view to standardise contrast dose and optimise image quality.

**Methods and materials:** 50 consecutive cases have been collected prospectively. Inclusion criteria are portal venous phase CT scans of the abdomen (with or without chest scanning) that utilise a new algorithm to calculate contrast

dose per unit weight. Hounsfield units at the portal vein in the porta hepatis, the mid abdominal aorta and the splenic parenchyma were measured and these values were correlated against patient weight.

**Results:** Results have shown a reduction in the variation of contrast enhancement with a more consistent image quality in patients with a wide range of weights.

**Conclusion:** This study shows that weight based contrast dosing can provide a more consistent image in patient populations with differing weights. This should contribute to a reduction in the percentage of suboptimal studies and possibly a saving of contrast usage.

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#### **P-089 Pictorial review of imaging appearances of portal vein pathology and available portal venous interventions**

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**Aim:** We aim to present a review of imaging appearances of pathology involving the portal vein and the available therapeutic options.

**Content:** We review the various portal venous pathologies in cirrhotic and non cirrhotic patients and the associated complications on a variety of imaging modalities including Ultrasound, Doppler, CT, MRI and digital subtraction angiography. We also discuss the currently available image guided interventional procedures such as portal venous pressure measurement, catheter directed thrombolysis, mechanical thrombectomy, embolisation, recanalisation, percutaneous balloon angioplasty, stent placement and transjugular intrahepatic portosystemic stent (TIPS) insertion.

**Relevance/impact:** Nearly 75% of the liver blood supply is by the portal vein and portal vein pathology can potentially contribute to major morbidity and mortality. The most common complications in cirrhotic patients is portal vein thrombosis. The manifestation of portal vein thrombosis in non cirrhotic patients is under recognised. We also review other relevant abnormalities such as portal venous gas, aneurysms, cavernous transformation, congenital porto systemic shunt, bland vs tumour thrombus and agenesis of the portal vein etc. Interventional radiology is the preferred modality in the treatment of most of these conditions. We depict this with various case illustrations.

**Summary:** Portal vein pathology and associated complications need to be recognised early for appropriate treatment. Interventional radiology continues to play a major role in the management of portal vein pathologies.

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#### **P-090 Acute drop in Haemoglobin. Cause?**

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**Objectives:** CT pictorial presentation of various causes of sudden drop in haemoglobin levels without evidence of GI haemorrhage.

**Content:** One of the potentially life threatening presentations of patients is that of acute drop in haemoglobin levels with not much clue in the form of per rectal bleeding, melena, haematemesis or history of trauma. Immediate identification of the cause for the same is very important as it can be treated surgically or by embolisation of bleeding vessels by the interventional radiologists or vascular surgeons.

We would like to present some examples which we came across in our practice over the few years. These are all CT findings showing various causes like hepatoma with spontaneous intraperitoneal haemorrhage, renal angiomyolipoma with retroperitoneal haemorrhage, pseudoaneurysm of gastroduodenal artery due to acute pancreatitis bleeding profusely, rectus sheath and psoas haematoma in a patient on Warfarin, intra peritoneal haemorrhage due to damaged superior rectal vessels, extensive intramural haematoma of the small bowel due to Warfarin, hepatocellular adenoma with spontaneous haemorrhage, renal cell carcinoma with spontaneous retroperitoneal haemorrhage etc.

This poster will educate the conference delegates to look for and think of few of the conditions when they come across such situation.

**Conclusion:** Acute drop in haemoglobin levels without evidence of external bleeding is life threatening and immediate search for the cause can be life saving. Pictorial review of the same will be demonstrated in the form of poster.

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## P-091 Intussusception: The radiologists guide

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Intussusception is a rare clinical entity in adults and occurs when one segment of bowel telescopes into an adjacent distal segment. Presentation may be acute or chronic, most commonly with abdominal pain, nausea and vomiting and only rarely associated with obstruction. Intussusception is an entirely different entity in paediatric and adult populations. In contrast to children, the majority of adults have underlying pathology, often identified on imaging at the time of diagnosis. Although surgery may be indicated where a lead point has been demonstrated, a significant group of patients have spontaneous subclinical intussusception requiring conservative treatment only. Radiology, CT in particular, plays a key role in demonstrating the intussusception and possible underlying cause in order to prevent potentially unnecessary surgery in this important subgroup of patients and facilitate surgical planning where appropriate.

Adult intussusception can be classified in terms of location and cause. It can occur from stomach to rectum. The majority of cases are tumour related (benign or malignant), post-operative, congenital or idiopathic, although there are a number of miscellaneous conditions also recognised. We describe the appearances of intussusception, demonstrating the findings diagrammatically and on CT. We illustrate the CT appearances of a wide range of underlying pathology including tumour (lipoma, carcinoma, lymphoma), congenital causes (duplication cyst, Meckels' diverticulum), post-operative (feeding tube) and inflammatory conditions such as Crohn's disease and cystic fibrosis. We highlight the importance of excluding a pathological trigger to intussusception to ensure appropriate patient management.

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## P-092 An audit on the validity of MRCP requests at a District General Hospital

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In a district general hospital the radiologists that there were too many MRCP requests and many of these requests were possibly unnecessary. Hence this audit was undertaken to determine the validity of the requests made by clinicians.

**Objective:** To ensure that MRCP requests made by clinicians adhere to appropriate criteria and the aim was to improve the adherence of this criteria.

**Standard:** The following should be the basic criteria required in order to obtain an MRCP:

1. Deranged LFTs of an obstructive pattern.
2. Intra/extra hepatic ductal dilatation and or filling defects seen on USS/CT.
3. A combination of the above.

**Exceptions:** Patients who require that area of anatomy to be visualised for other reasons i.e. CBD injury post ERCP.

**Findings:** 105 patients from the period of 08/11 - 08/12 were recruited

Deranged LFTs= 46 (44%)

Abnormal USS/CT =16 (15%)

A combination of the above 1 and 2 = 35 (33%)

Exceptions to the criteria = 3 (3%)

Invalid requests = 5 (5%)

All 5% of the invalid requests had a normal MRCP, therefore it was a waste of resources.

Currently we are implementing a request proforma in order to obtain an MRCP. The aim is to reduce the invalid requests to 0%. Once this is implemented, the aim is to complete the audit cycle by June 2014.

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### **P-093 A pictorial review of small bowel pathologies and their appearance on multi-slice computed tomography**

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*Victoria Infirmary, NHS Greater Glasgow and Clyde*

**Aims/objectives:** To present a pictorial review of the varying range of small bowel pathologies encountered at Computed Tomography (CT).

**Content:** The widespread application of multi-slice CT in assessment of a range of presentations has resulted in an improvement in small bowel depiction, even without dedicated enteric preparation. A range of pathologies are presented, including tumours (adenocarcinoma, carcinoid, gastrointestinal stromal tumour, angiosarcoma and metastases), inflammation (inflammatory bowel disease, non-steroidal induced enteritis and radiation enteritis) and ischaemia, with common imaging features and techniques described, with multi-modality correlation as applicable.

**Relevance/impact:** This review will be of use to radiologists, radiographers and any other members of the multi-disciplinary team involved in imaging and management of small bowel disorders or investigation of gastrointestinal problems.

**Outcomes:** The importance of recognising and characterising the wide range of small bowel pathologies is demonstrated via a pictorial review of multiple small bowel pathologies evident on multi-slice CT studies.

**Discussion:** In addition to example imaging of small bowel pathologies, pertinent facts, common imaging features and clinicoradiological correlation will be addressed.

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### **P-094 The role of CT enterography in the assessment of small bowel Crohn's**

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There are an estimated 115,000 people in the UK with Crohn's disease. Approximately 70% of patients will have small bowel involvement. Imaging plays a key role in the initial diagnosis, management and identification of complications in this chronic condition.

CT enterography is a valuable imaging technique for the assessment of small bowel Crohn's and can complement MR enterography. It can be particularly useful in assessing patients with complex anatomy.

Our poster will aim to provide the radiology trainee or general radiologist with a pictorial overview of the features of small bowel Crohn's on CT enterography. We will discuss indications, technique and imaging features with an emphasis on cases where CT has proven particularly useful in providing diagnostic information.

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### **P-095 Rectal contrast: Uses in clinical radiology**

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*University Hospital of Wales, Cardiff and Vale University Health Board*

The role of fluoroscopic techniques in abdominal radiology has been largely superseded by CT imaging. However, this can pose specific challenges in patients with complex CT appearances, eg. in patients with previous extensive surgical history.

Rectal contrast is a useful tool when imaging complex pelvic disease and in particular is invaluable in the delineation of fistulous tracts and anastomotic leaks on CT.

We describe the techniques involved and provide specific examples of cases where the use of rectal contrast has proved essential.

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### **P-096 Uncommon anal canal lesions mimicking malignancy**

[Dhivya Murthy Paravasthu](#); [Madhusudan Paravasthu](#); [Jayan Nair](#); [Ashok Katti](#); [James Arthur](#)

*Aintree University Hospital NHS Foundation Trust*

**Aim:** We aim to present the normal imaging anatomy of the anal canal and unusual pathological mimics which could be confused for anal canal malignancy.

**Content:** We present a review of the imaging anatomy of the anal canal and a series of unusual cases is also presented with imaging findings that mimic anal canal malignancy and include benign pathological entities such as haemorrhoids, complex fistula, procidentia (Full-thickness Rectal prolapse), abscesses, Pagetoid dyskeratosis, anal

tags and tumours such as melanoma, neurofibromas and GIST (Gastrointestinal stromal tumours). The importance of the knowledge of normal anatomy is once again emphasized in recognizing the pathology or variants.

**Relevance/impact:** A detailed knowledge of the normal imaging appearances is necessary to diagnose pathological conditions and also normal variants. A variety of entities can mimic anal canal tumours and this review is aimed at presenting such mimics and will hopefully serve as an educational tool. Appropriate clinical history and findings and pathological correlation are paramount.

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#### **P-097 A pictorial review of anatomy, typical appearances, and complications related to common gastrointestinal tract (GIT) surgeries**

[Delilah Khan](#); [W Chong](#); [J Mullany](#); [A Gemmell](#); [Ajay Sahu](#); [S Jackson](#)

*Plymouth Hospitals NHS Trust*

**Introduction:** The most difficult emergency oncall scans to interpret for radiology registrars are considered the surgical post-operative scans. It is important prerequisite to be familiar with the common abdominal surgeries for further evaluation of any postoperative complications by the radiologist. It is usually not possible to get a gastrointestinal radiologists opinion till next morning. Radiology trainees early in their career are not experienced but imperatively encounter such scans during their oncalls. Hence it is crucial to have a basic understanding of these procedures.

**Aims/objectives:** The goal of our pictorial review is to schematically review common gastrointestinal tract surgeries regarding anatomy and illustrate normal postoperative appearances on CT scan.

**Methods:** We will provide a comprehensive overview of all abdominal operations involving the gastrointestinal tract, pancreas, hepatobiliary and genitourinary systems surgical appearances from our institution. We then will discuss and illustrate potential postoperative complications such as postoperative leaks, mesenteric ischaemia, anastomotic strictures, and internal hernias which will be described alongside imaging examples of the procedures. GI abdominal surgical procedures and their imaging appearances, such as those of Ivor-lewis oesophagectomy, colonic interposition, vagotomy, gastric bypass, Billroth procedures, Whipples procedure, chronic pancreatitis (Frey's, Puestow's and Berger's), total pancreatectomy, sphincterotomy), liver transplantation and resection, radiofrequency ablation, TACE, TIPSS, short bowel, blind loop and pouch syndromes, stomas and colonic resections (e.g., low anterior resection, abdominoperineal resection), mucous fistulas etc will be reviewed.

**Conclusion:** The knowledge of commonly performed gastrointestinal tract surgeries and their expected appearance and complications is of paramount importance for the radiology trainee.

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#### **P-098 Percutaneous biliary stenting in a DGH - comparison with national audit**

[David Little](#); [Atique Imam](#); [Andy Beale](#)

*Great Western Hospitals NHS Trust*

**Aims/objectives:** The aim of this audit was to compare the practice of biliary drainage and stenting in a large DGH with the First Biliary Drainage and Stent Audit Report 2009.

**Content:** We present the results of an audit of over 3 years of local practice of percutaneous biliary stenting including; patient demographics, operator experience, stenting success rate, reasons for failure, reduction in bilirubin and 30/80 day mortality.

**Relevance:** Interventional radiology provides a solution in those patients with biliary obstruction in which ERCP is unsuccessful. It is a relatively common procedure but due to the nature of the patients, is often a palliative treatment and carries a high associated morbidity and mortality. The 2009 national audit provides a standard for hospitals to compare themselves to.

**Outcomes:** The patient's age and gender were broadly similar between the local and national groups. The local stent success rate was 72% which is less than the national audit (98.7%), this may be due to a differences in data collection. The local 30 and 80 day mortality was 23% and 48% respectively, which was similar to the national audit.

**Discussion:** The national audit was a voluntary register which is subject to varying degrees of incomplete and selective data reporting. This may account for the difference in our institution compared with the national audit. Nevertheless, it is important to evaluate local practice to ensure a good standard of care.

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#### **P-099 Combined fluoroscopic and CT imaging to improve the diagnostic accuracy of anastomotic leaks and intestinal fistulae**

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*Surrey & Sussex Healthcare NHS Trust*

**Aims/objectives:** To assess if the use of water-soluble contrast studies followed by CT improves diagnostic accuracy of leakage from bowel anastomosis or detection of intestinal fistulae.

**Content:** Reviewing departmental fluoroscopic images from 2013, we looked at how many patients with an unclear diagnosis of a leak/fistula immediately went on to have a CT, either to clarify its location, extent and anatomical significance, or to rule it out. Using abdominal CT following water-soluble contrast enema or small bowel contrast study there was no need for IV contrast and radiation exposure was kept to a minimum, thereby answering the clinical question and minimising patient risk.

**Relevance/impact:** This could change the method of diagnosing leaks and fistulae in those with diverticulosis, IBD and the competency of anastomosis following bowel surgery.

**Outcome/discussion:** In 86% of patients with an abnormality on fluoroscopy, the diagnosis was confirmed on CT (positive predictive value) and provided additional anatomical information vital to their care. However, 50% with no abnormality on fluoroscopy who later had CT due to clinical concerns showed there was a leak/fistula present (false negative). The sensitivity of combined fluoroscopic and CT imaging is 75% and the specificity is 66%. This suggests that even when fluoroscopy is positive, a CT may provide further relevant information. However, if no abnormality is detected but there remains clinical concern by the clinician a CT may still be needed.

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#### **P-100 A trainee's guide to hypervascular liver lesions**

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*Wirral University Teaching Hospital NHS Foundation Trust*

**Objectives:** 1. To guide the trainee radiologist in characterising incidentally detected hypervascular liver lesions.  
2. To act as a refresher to radiology trainees and consultants alike by reinforcing their knowledge on the imaging appearances of hypervascular liver lesions.

**Content:** With the increasing use of multidetector CT, hypervascular hepatic lesions are frequently detected, often as an incidental finding. They include benign conditions such as haemangiomas, FNH and adenomas and malignant lesions such as HCC and hypervascular liver metastasis.

Characterising these lesions can be a diagnostic challenge as they all may look very similar in the arterial phase. The dual supply of the liver enables imaging it in two separate phases, namely arterial and portal venous. Differentiation is done by looking at the enhancement pattern in other phases, gross pathologic features, clinical findings and most important, review of all previous available imaging.

With a high lesion-liver contrast and no radiation exposure, MRI has emerged as the imaging modality of choice for detection and characterization of liver lesions.

We present a pictorial review illustrating the commonly encountered hypervascular lesions and a step by step guide of how to characterise them based on US, CT and MR appearances.

**Impact:** This educational exhibit hopes to have helped the observer understand the spectrum of enhancement patterns of hypervascular liver lesions. As most of these are detected incidentally, the radiologist by characterising them has a particularly valuable role in guiding patient management.

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### P-101 A pictorial review of unusual gallstone complications

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**Aim and objectives:** Gallstones are a common pathology and are often an incidental finding diagnosed in 10-15% of adult patients in the western world in 2012. This often harmless condition can have serious complications that need prompt recognition and management. Using a pictorial review we aim to highlight the imaging findings of some of the more unusual complications that we have encountered in clinical practice that have important acute and chronic implications for the patient.

**Method/pictorial review/content:** Using a range of imaging modalities radiographic findings of important gallstone complications will be covered including uncommon cases such as pseudo-aneurysm of the hepatic artery, cholecysto-duodenal fistula, intra-peritoneal abscess secondary to dropped gallstones, emphysematous cholecystitis and a large biloma secondary to retained CBD stones. Imaging examples of more common entities such as gallstone ileus, gallbladder empyema, hepatic abscess and porcelain gallbladder will also be reviewed.

**Discussion/impact:** Although often harmless, gallstones can have serious complications and it is important for the radiologist to be aware of the more unusual complications that need early recognition and diagnosis.

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### P-102 A pictorial review of endoscopic ultrasound of hepatobiliary system and pancreas: A checklist for the radiologist

Harriet Barber; D Shetty; A Gemmell; Ajay Sahu; K Giles; BM Fox

Plymouth Hospitals NHS Trust

**Introduction:** Endoscopic Ultrasound (EUS) is the procedure of choice in the evaluation of a dilated common bile duct (CBD) or in suspected biliary pathology when transabdominal ultrasound fails and patient cannot have MRI. Radiologists are well aware of the impact of cross-sectional imaging upon the diagnosis and treatment of hepatobiliary and pancreatic disorders. However, most upper GI surgeons and general radiologists have little familiarity with the increasing role of EUS.

**Aims/objectives:** This pictorial review aims to familiarize radiologists with the basics of EUS technique and its complementary role to cross-sectional imaging. The correlation between the morphologic features of lesions on cross-sectional imaging and EUS is pivotal in making important treatment decisions.

**Method:** This review will detail basic EUS technique and anatomy with particular emphasis on the hepatobiliary system such as the altered anatomy of the gallbladder and intrahepatic biliary tree, juxta papillary duodenal diverticulum, evaluation of the papilla and distal CBD, benign stenosis or adenomyomatous hyperplasia of the papilla. Pancreatic abnormalities such as solid pancreatic masses eg pancreatic adenocarcinoma and neuroendocrine tumours, cystic pancreatic lesions (pseudocysts, IPMN, serous and mucinous cystic neoplasms) and benign conditions such as chronic pancreatitis and autoimmune pancreatitis will be discussed.

**Conclusion:** EUS has shown great usefulness not only in its ability to make the diagnosis but also in its ability to biopsy the lesions. EUS must be looked upon as an important complementary tool to cross-sectional imaging in the evaluation of hepatobiliary and pancreatic diseases in the diagnostic algorithm for these disorders.

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### P-103 A pictorial review of pancreatic and extra-pancreatic imaging findings in autoimmune pancreatitis

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Plymouth Hospitals NHS Trust

**Aims/objectives:** To describe our experience with characteristic pancreatic and extrapancreatic imaging findings on CT and MRI for diagnosis and imaging findings in patients with autoimmune pancreatitis.

**Methods and materials:** Autoimmune pancreatitis (AIP) is a form of chronic pancreatitis characterised clinically by frequent presentation with obstructive jaundice, histologically by fibrosis, and therapeutically by a good response to steroids. It is crucial to diagnose and differentiate autoimmune pancreatitis from pancreatic cancer and other forms of chronic pancreatitis (such as alcohol) as steroid treatment is effective both in reversing morphologic changes but also to return pancreatic function to normal.

**Discussion:** We will look at the spectrum of pancreatic imaging findings suggestive of autoimmune pancreatitis on cross-sectional imaging. This pictorial review will show the characteristic imaging findings on CT and MRI with case examples including diffuse or focal swelling of the pancreas, enhancement patterns in the arterial and venous phase,

abnormal enhancement of the common bile duct, intrahepatic biliary ductal dilatation, and extrapancreatic findings in the kidneys, bile ducts, and peri-pancreatic tissues that will help in diagnosis and imaging findings on MDCT, including parenchymal changes in pancreas.

**Conclusion:** Characteristic pancreatic and extrapancreatic imaging features on CT will help the radiologist in the diagnosis of autoimmune pancreatitis, and it is important to know imaging features on cross-sectional imaging after steroid treatment that will help to assess appropriate response to therapy. For the diffuse form, it is imperative to consider lymphoma, plasmacytoma, pancreatic metastases, and diffuse infiltrative ductal adenocarcinoma in the differential diagnosis.

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#### **P-104 Radiological features of pathology in the appendix and right hemicolon: A pictorial review**

Moni Sah; Syed Mustafa; Jullian Chakraverty; Rwth Owen; Luke Wheeler

*University Hospital of Wales, Cardiff and Vale University Health Board*

**Aim:** To exhibit the imaging of a range of common and rare, but vital, appendix and right sided colonic diseases with unique examples from our clinical practice. Appropriate imaging will avoid unnecessary intervention and can help to plan treatment.

**Content:** This presentation will display radiological signs of various conditions such as infection (acute appendicitis, epiploic appendagitis, caecal diverticulitis, intestinal tuberculosis), inflammation (crohn's and ulcerative colitis), tumours (carcinoid of appendix, carcinoma of appendix, mucocele of appendix, caecal lymphoma, adenocarcinoma of colon) and miscellaneous diseases (endometriosis involving the appendix, caecal volvulus, caecal bascule, typhlitis and post-transplant lymphoproliferative disease).

**Relevance:** Pathologies of the right hemicolon and appendix are common acute surgical or medical emergencies. A meticulous history and detailed clinical examination is essential in planning appropriate investigation. However, radiological input is immense in identifying the cause and guiding the clinician's response. In addition, we will reveal tip and tricks and some of the challenges in making a radiological diagnosis.

**Outcomes:** This will enable the radiologists and clinicians to more accurately recognise various pathologies of appendix and right hemicolon. It will improve understanding of the pathological processes involved and direct appropriate management strategies.

**Discussion:** There is a spectrum of appendix or right hemicolon related diseases ranging from those which are common to rare entities. Few of these conditions may represent as serious life threatening or malignant conditions. It is imperative that a radiologist be able to confidently distinguish between these conditions and play an important and effective role in the clinical management.

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### **Clinical: Paediatrics**

#### **P-105 In the neck of time**

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*Royal Devon and Exeter NHS Foundation Trust*

**Objectives:** To review both the common and more unusual neck lumps referred for imaging including discussion of pathologies and imaging modalities.

**Background:** Neck lumps in Paediatric patients are a common cause for referral to Radiology. The most common finding on imaging of these lumps are lymph nodes, enlarged or otherwise. A confident diagnosis and the exclusion of other, more sinister or unusual pathology is welcomed by clinicians and parents alike. Whilst most neck lumps are imaged by means of Ultrasound, the appropriate use of other modalities can be of further benefit.

**Content:** Discussion of various head and neck lump pathologies along with their imaging findings and examples. This will include cases of parotitis and its chronic appearance, ranulae, thyroglossal cysts and bony lesions. The use of appropriate modalities for different lesions will be covered together with the types of lesion to consider as differentials in varying age groups. The imaging appearance of normal versus abnormal cervical lymph nodes will also be reviewed.

**Outcomes:** Paediatric neck lumps are a common cause for referral to the imaging department. A clear understanding of anatomy, appearance and modality of choice are vital for a reliable diagnosis.

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