

Clinical: GI and hepatobiliary

P-085 Epiploic appendagitis, a less common cause of abdominal pain

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Aims:Imaging of acute abdominal pain in an acute emergency situation can pose a significant challenge to trainee registrars. In the last few years, it is often the radiology trainee who makes the initial decision on appropriate imaging investigation and interprets the same. This exhibit describes several cases of epiploic appendagitis as a less common cause of abdominal pain and discusses the appearances of this entity. Comparison is made between computed tomography and magnetic resonance imaging features. The literature related to this condition is reviewed.

Content: The spectrum of computed tomography and comparison to magnetic resonance imaging features of epiploic appendagitis.

Relevance: To demonstrate different imaging features of epiploic appendagitis and explore the related literature.

Discussion: Pictorial assay of imaging of acute abdominal pain due to epiploic appendagitis.

P-086 The rare consequences of blunt abdominal trauma; from subtle mesenteric injury to the abdominal blowout

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Aims/Objectives: We aim to highlight a number of important but less encountered/diagnosed and often subtle findings in the setting of blunt trauma.

Content: Cases from a major trauma centre which demonstrate classic and interesting findings of significant blunt intra abdominal injury of non-solid organs.

Relevance/Impact: In a chaotic trauma setting the presence of other injuries, be it solid organ or musculoskeletal, may distract the Radiologist from other findings. Subtle clues indicative of bowel injury can be easily overlooked. Presence of such injuries influences the management and a delay in diagnosis can increase morbidity and mortality in trauma patients. Injuries to the abdominal musculature can be subtle and may result in hernia formation with the added complications and surgical repair requirements.

Outcomes: We hope to raise awareness of a few uncommon but significant intra-abdominal injuries.

Discussion: CT has become increasingly important in the first line management of trauma patients. Accurate diagnosis of findings in this acute setting is crucial in expediting treatment of such patients. In this presentation we aim to highlight some useful signs which signify important pathology related to the bowel, mesenteric and abdominal wall injuries.

P-087 Large unusual intra abdominal mass lesions. Imaging review

Deepak Pai; Ajay Dabra; Chaitanya Gupta; Claire Horton; Rasika Singh

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Objectives-To present five large unusual intra abdominal mass lesions with different pathology

Description- Abdominal pain and distension is one of the common causes of presentation in surgical, medical outpatients as well as emergency department. Many causes have been described but bowel obstruction and ascites being the commonest. Large solid/cystic masses are well known to occur especially in female patients related to gynaecological mass lesions.

We came across five very unusual cases both in men and women unrelated to gynaecological causes. All of these cases posed diagnostic challenges on imaging, prior to surgical exploration, biopsy and histological confirmation.

Final diagnosis on these cases were GIST(Gastrointestinal Stromal Tumor), testicular malignancy with extensive intra abdominal metastases, gossypiboma, psammoma carcinoma of the ovary with widespread peritoneal psammoma



bodies mimicking calification and pseudomyxoma peritonei. All of them had unusual features on imaging and hence we would like to share them with the conference delegates.

Conclusion- Large solid or mixed solid/cystic masses can pose challenge on imaging. Good history and searching for subtle imaging features may help in pre-biopsy diagnosis

P-089 Radiation dose for radiologically inserted gastrostomy: How low can you go?

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Purpose: To review the radiation dose for radiologically inserted gastrostomy in a specialist cancer centre in light of a national survey, indicating a national average of the Dose Area Product (DAP) of 430 cGycm2.

Methods: A review of the DAP readings was undertaken on procedures performed at a specialist cancer centre over a 19 month period.

12Fr balloon-retained gastrostomy tubes were placed after 3-point gastropexy under conscious sedation. Where a naso-gastric tube was not in place, a catheter was inserted for gastric inflation from the mouth under screening. Procedures were performed by two experienced GI radiologists assisted by specialist radiographers on a Phillips Multidiagnost Eleva FD system with a flat panel detector. Images were acquired using both "fluoro-grab" storage as well as formal "single—exposure" as clinically indicated. The lowest fluoroscopy frame-rate (0.5/s) was used routinely.

Results: 100 consecutive examinations were analysed. 42% required initial insertion of an inflation catheter. A minimum of 6 acquired images were regarded as standard: 1. Gastric position and inflation 2-4. Control injection for each T-fastener insertion, 5. Guidewire insertion, 6. Final tube position. These were satisfactorily obtained and documented by recording a single fluoroscopy frame in most cases.

Mean DAP reading without catheter placement was 7.3 cGycm 2 (range 0.2 – 87.5) rising to 28.0 cGycm 2 (4.0 – 346.3) when catheter insertion was required.

Conclusion: With appropriate technique the radiation dose for radiologic gastrostomy using a standard general purpose fluoroscopy unit should be minimal. Operators should critically appraise their use of real-time fluoroscopy and formal exposures.

P-090 Does oral omnipaque 350 preparation for routine abdominopelvic CT work as well as gastrografin and is it better tolerated by patients?

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Aims: Using Omnipaque instead of gastrografin as an oral contrast medium for routine abdominopelvic CT at our centre was evaluated as part of a cost reduction programme. The aim of this study was to compare bowel opacification between Omnipaque and Gastrografin and evaluate any difference in patient satisfaction.

Methods: Seventy-two patients requiring routine abdominopelvic CT were randomly selected. 35 received gastrografin (one vial=25ml) and 37 received omnipaque (one vial=20ml), diluted in 500ml of water taken in equal measures at 60,30,0 minutes. Opacification of the bowel (stomach, duodenum, jejunum, ileum and terminal ileum) was assessed by a Consultant Radiologist, blind to the preparation received, and scored according to a 3 point system.

Patient preference was assessed using a patient satisfaction survey completed immediately after the investigation. Non-parametric tests using SPSS were performed and p-values <0.05 were considered statistically significant.

Results: Opacification of the terminal ileum was significantly better statistically with gastrografin compared to omnipaque (p=0.016). There was no significant difference in opacification in the stomach, duodenum, jejunum or ileum. Omnipaque was found to be significantly more palatable than gastrograffin (p=0.001).

Conclusion: Omnipaque is comparably more cost-effective than gastrografin, however gastrografin seemed to provide superior bowel opacification in the terminal ileum. There was no statistical difference in the remainder of



the bowel. Omnipaque was considered to be significantly more palatable than gastrografin, an important finding as a nicer taste will improve patient compliance and consequently improve preparation and sensitivity of CT. These results help justify the use of Omnipaque in our centre.

P-091 To bleed or not to bleed: A comprehensive review of imaging features in acute gastrointestinal haemorrhage

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Purpose/Aim: To review the imaging appearances on multidetector computed tomography (MDCT) of common pathologies causing acute gastrointestinal (GI) haemorrhage

To review the imaging appearances on corresponding conventional mesenteric angiography and interventional radiology methods of treatment.

To review imaging follow up and clinical outcomes.

Content: To review the imaging options in cases of acute GI haemorrhage.

Using examples form a case series of 43 patients who underwent both MDCT and conventional mesenteric angiography+/- intervention, we review the imaging chrarcteristics of common pathologies causing acute GI haemorrhage.

To discuss interventional radiology treatment methods.

To specifically review those cases where MDCT was postive and subsequent angiography was negative.

Summary: MDCT plays a vital role in the diagnostic pathway of patients presenting with acute GI haemorrhage. This is often followed by prompt interventional radiology treatment. By using cases from a case series we aim to review the common pathologies with their corresponding imaging characteristics and focus on which, in our experience, are most amenable to interventional treatment.

P-092 Pictorial review of spectrum of findings of mucocoele of the appendix on CT

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Scunthorpe General Hospital; Diana Princess of Wales Hospital, Grimsby

Learning Objectives- To review the spectrum of findings of mucocoele of the appendix that can be encountered in CT of the abdomen in both symptomatic patients as well as an incidental finding

Description- Mucocoele of the appendix is an uncommon condition seen in approximately 0.5-1% of appendix specimens. The cause for this can be both benign and malignant tumors causing luminal obstruction and accumulation of the mucin. CT is the modality of choice to demonstrate them. Detection of these in the preoperative imaging may change the surgical approach to avoid their rupture so that development of pseudomyxoma peritonei can be prevented.

We present the CT pictorial review of 14 cases of mucocoele of the appendix encountered in our practice which were confirmed at surgery and histology.

8 out of these 14 cases had calcification in their wall. 6 of them had curvilinear calcification and 2 only dot calcification. 8 of them showed only cystic dilatation of the appendix, 1 with superadded infection, 2 localised perforation and 2 widespread pseudomyxoma peritonei.

3 of these cases posed challenge in the preoperative CT to differentiate them from other cystic lesions in the pelvis but detection of curvilinear calcification helped in the differentiation.

Conclusion- This poster will educate the delegates regarding the spectrum of findings of appendicocoele that can be encountered in CT of the abdomen. Detection and characterisation of these is very important prior to surgery to avoid pseudomyxoma peritoneii as it can have long term devastating effects on patient's life.



P-093 Advanced practitioners in CT colonography, does having a different skill set within advanced practitioners improve diagnostic findings?

Denise Twist; Gillian Holroyd

St Helens & Knowsley Teaching Hospitals NHS Trust

Purpose: We describe a process in CT Colonography whereby an experienced cross sectional radiographer and an experienced GI radiographer complement the diagnostic valuation of CT Colonography

Method: We will be retrospectively auditing the findings of CT colonography examinations performed by a GI advanced practitioner with an advanced CT radiographer and comparing with findings from examinations performed by the same GI advanced practitioner and a general CT radiographer

Results: We will be using the results obtained from this audit to discuss the advantages for the total patient journey

Conclusion: We will demonstrate the advantages of advanced radiographic skill mix in CT Colonography

Clinical: Multisystem disorders

P-094 Pictorial review of unusual foreign bodies identified on various imaging modalities and their differentiation from an in situ medical device

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Purpose:We present a retrospective cohort of interesting and unusual cases of foreign bodies detected on various imaging modalities. To enhance awareness to radiology trainees and consultants alike by reinforcing their knowledge on the imaging appearances of a range of common and rare foreign bodies encountered in clinical practice.

Methods: Foreign bodies can be ingested, inserted into the body cavities and even soft tissues by trauma, iatrogenic injury or by self-harm. Foreign bodies have different imaging appearance depending upon the imaging method obtained and composition of the material itself. It is vital for the radiologist to familiarize themselves with different medical devices so that their differentiation from an unwanted foreign body should not become challenging.

Results: We present in pictorial fashion a comprehensive spectrum of cases of unusual foreign bodies highlighting their key characteristic and differentiating features from medical devices, which can be a source of confusion for radiologist.

Conclusion: This educational poster hopes to have availed the observer enabling radiological identification of foreign bodies and its differentiation of the common medical devices that we come across in everyday practice.

P-095 Lymphoma: The great mimic

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Purpose/Aim: Lymphoma is a common diagnosis that is clinically and radiologically straight-forward if the textbook symptoms, signs and supportive imaging are present. However, in our institution we have experienced several cases where patients with lymphoma have presented with classical symptoms and signs for alternative diagnoses and lymphoma has been much lower down our list of differentials. Through a series of interesting clinical cases and selected radiological images we demonstrate how lymphoma is the great mimic and can present in a multitude of different ways.

Content Organization: Pictorial radiological images include cases of lymphoma mimicking Pancoast tumours, pancreatitis, caecal inflammatory masses, peritoneal carcinomatosis and multiple intussusceptions.

Summary: Although lymphoma appears somewhere on most lists of differential diagnoses, here we prove why it earns its place there and why the diagnosis should always remain at the forefront of the wary radiologist's mind.