

Piecemeal-EMR (p-EMR) was longer than en-bloc EMR (mean duration = 63 vs 48 min, mean difference = 14 min,  $p < 0.0022$ ).

Sigmoidoscopy EMR ( $n = 52$ ) was not significantly longer than colonoscopy EMR ( $n = 43$ ) (mean times: 53 vs 50 min mean difference = 3 min  $p = 0.28$ ).

Removal of  $>1$  polyps ( $n = 74$ ) was not significantly longer than that for 1 polyp ( $n = 21$ ) (Mean time: 53 vs 46 min, mean difference = 7 min  $p = 0.1115$ ).

**Conclusion** The time taken for endoscopic mucosal resection of colonic polyps did not exceed the allocated significantly. The factors that affected the duration significantly were age of the patient and size of the polyp. Piecemeal EMR was also associated with longer duration than en-bloc-EMR.

These factors should be taken into consideration when booking patients for planned endoscopic resection of colonic polyps.

**Disclosure of Interest** None Declared.

#### PTH-055 USS SMALL BOWEL FOR CROHN'S DISEASE – SINGLE CENTRE EXPERIENCE IN MEDIUM SIZED DGH

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**Introduction** USS (Ultra sound scan) in experienced hands is good radiological modality in diagnosing, confirming or ruling out Crohn's disease. USS is easy, cost effective and without risk of radiation as compared to CT (Computerised tomography) or MRI (Magnetic resonance imaging) scans. USS can be particularly useful in younger population with Crohn's who may require repeated imaging.

We were interested to look at outcomes of USS of small bowel performed by dedicated GI (gastrointestinal) radiologist in our hospital.

**Methods** We audited efficacy of USS in patients with known, suspected or to exclude Crohn's disease. A retrospective review of patient records using specialised electronic Medicorr and PACS databases was performed. Demographic information, diagnosis, procedural details and subsequent result of USS was entered into a Microsoft Access database and analysed using Microsoft Excel.

**Results** A total of 145 patients underwent USS of small bowel in 18 months. The average age was 40. There were 97 females and 48 males. USS was performed in fifty seven patients with known, twenty four suspected and in 64 patients to exclude Crohn's disease. In known disease group thirty four (60%) had normal USS (these patients were in remission), and twenty three (40%) had USS findings consistent with active, small or large bowel disease, strictures, fistulating disease and abscesses.

For suspected group, 17 patients (70%) had normal and seven (30%) had features consistent with Crohn's. Five of these positive scan patients had MRI scans. 2 MRI scans confirmed USS findings, 3 were normal and required endoscopic confirmation.

In exclusion group 64 had USS with 61 (95%) normal and 3 (4%) abnormal. Findings of 3 abnormal scan showed gallbladder polyp, caecal thickening (colonoscopy confirmed caecal tumour) and non-specific ileitis with negative colonoscopy and histology. **Conclusion** Our results show that USS is reliable and as good as other imaging if done by experienced radiologist with special interest in GI radiology. USS is cost effective, readily available and free of radiation. It is cheap, portable, flexible and user- and patient-friendly. It can save cost and time required for CT and MRI scan especially in district general hospital.

We recommend utilising USS small bowel to assess disease activity in known cases and also to confirm or exclude the disease provided experienced GI radiologist is available.

#### REFERENCES

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#### PTH-056 PRODUCTIVE ENDOSCOPY PROJECT

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**Introduction** In June 2012 the Royal Liverpool endoscopy department was chosen by NHS Improving Quality to be a pilot site for the development and implementation of a productive endoscopy toolkit. The outcome was improved efficiency, safety, patient experience and team-working.

**Methods** The aim was to apply processes and cultures of lean thinking to endoscopy and complete a series of modules that increase safety, reliability of care, improve team performance and improve efficiency.

A six month “diagnostic phase” involved collecting data on all aspects of the service to identify areas for improvement. A number of modules were completed that tackled the inefficiencies identified and involved the engagement of all staff groups.

**Results** Stock: The “well organised unit” module identified £7,500 of redundant stock. Clearing the extra space meant equipment could be re-allocated, releasing two bed spaces in recovery.

Enemas: 44% of patients were not compliant with their enemas. Of the 56% who were complaint 14% was ineffective. This impacted on the daily running of the department due to un-prepped patients. This has led to a different type of enema now being used along with the development of more detailed patient information.

Department efficiency: Start/ Stop audit identified that 15% of the time, rooms were not utilised and 85% of time the list started late, due to staff or the room not being ready for the start of the morning session. Sharing this information with the teams led to more motivation and demonstrable leadership by senior Clinicians and Nursing staff to improve workforce compliance. 50% of lists finished late, 43% was due to complex procedures over-running this has led to stricter vetting and more points allocated for these procedures. Further data analysis has shown that Thursday and Friday run late 65% of the time due to endoscopists arriving late for the start of the afternoon session because of over-run clinics. This has led to a review of the scheduling template.

Patient experience: Long waits were problematic for patients particularly, time after admission, prior to procedure, patients waited 12 to 90 mins and time spent post procedure, waiting for discharge, up to 210 mins. Discharges were also slower in the afternoon than in the evening. Review of skill mix and assigning specific roles to discharge will help to expedite effective and timely discharge.

**Conclusion** Working through the innovative tools and processes of each module has allowed us to use an evidence based methodology for quality improvement. The use of advanced data