PTU-130 **ENDOSCOPIC TRAINING: COLON POLYP ASSESSMENT** 

doi:10.1136/gut.2011.239301.258

R J Mead,\* M Duku, G Longcroft-Wheaton, D Pearl, P Basford, P Bhandari Gastroenterolgy, Queen Alexandra Hospital, Portsm, NHS, Portsmouth, UK

**Introduction** Japanese endoscopists have been using pit pattern recognition in early colorectal neoplasia for many years. It has a key role in the decision to endoscopically resect or defer to surgery.

We have been training in Kudo's pit pattern recognition as part of an endoscopy fellow programme studying EMR, and *in vivo* optical diagnosis.

We aimed to evaluate our accuracy in pathological prediction relative to: 3 experienced untrained peers; a specialist UK consultant endoscopist; and a specialist Japanese consultant endoscopist.

We aimed to assess 2 separate training interventions; an untrained endoscopist undergoing a 1 h training session in pit pattern assessment and pathological prediction; an endoscopy fellow undertaking a 4 week visit to a specialist centre in Japan.

Methods 111 pictures of polyps seen by white light (38), chromoendoscopy (35), and magnification chromoendoscopy (38) were studied by all participants. Prediction of pathology was made, and compared to actual pathology; 37 hyperplastic, 43 adenomatous and 31 cancer polyps. All participants were blinded until the study was completed. 60 pictures were assessed by all fellows and untrained peers prior to intervention, with one peer further assessed after a 1 h teaching session using a GIE supplement for illustration. Six weeks after the initial assessment the same 60 pictures and a further 51 not seen before were assessed by all.

Results were compared to results achieved by the UK and Japanese consultant endoscopists from a separate study using the same polyp library.

## **Results**

Endoscopy fellows

Endoscopy fellows achieved a mean accuracy higher than the untrained peers, 72% versus 64%. Additional training in Japan showed no significant increase in diagnostic accuracy, 72% versus 73%.

Accuracy of fellows versus specialist endoscopists

The specialist UK endoscopist achieved 87% accuracy. This was not statistically different to the specialist Japanese endoscopist at 93%. Fellows achieved an overall accuracy of 72%, with highest accuracy in their area of interest (metaplastic polyps 84%, polyp cancer 79%).

Untrained endoscopist intervention

Overall accuracy improved from 60% to 65% after 1 h teaching, and was 63% at 6 weeks. The sensitivity in diagnosing polyp cancer rose from 69% to 75%, and finally 94% at 6 weeks.

**Conclusion** Training as a specialist endoscopist increases skill in lesion recognition compared to untrained peers.

Additional training in Japan does not necessarily increase lesion recognition skills above that gained from UK training.

A simple 1 h intervention in an untrained endoscopist increased accuracy in lesion recognition, and improved polyp cancer recognition.

Mastery of lesion recognition to the level of specialist Japanese endoscopists is possible, but requires ongoing study and assessment.

## Competing interests None.

**Keywords** endoscopy, kudo, pit pattern, registrar, training.

A122