Conclusion This data supports the previous findings that the BO lesion length of greater than 3 cm is associated with the presence of IM. Furthermore, the odds of having IM are significantly reduced in patients from the Indian sub-continent. Ethnicity should thus be taken into account in the future risk stratification of BO patients and requires further study.

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Disclosure of Interest None Declared.

PTU-176 IMPLEMENTATION OF OBJECTIVE ACTIVITY MONITORING TO SUPPLEMENT THE INTERPRETATION OF AMBULATORY OESOPHAGEAL PH INVESTIGATIONS

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Introduction Conventional catheter-based systems used for ambulatory oesophageal pH monitoring have been reported to affect patient behaviour. As physical activity has been associated with gastro-oesophageal reflux disease (GORD), there is a risk that abnormal behaviour will degrade the value of this diagnostic investigation and consequent management strategies. Our aim was to provide the reporting physician with objective peri-investigational changes in activity, and the means to assess the association between activity and pH during the test, using a wearable activity monitor.

Methods Trial registered at clinicaltrials.gov (NCT01507298) and ethics approved (11/LO/1981). Twenty patients listed for 24h pH monitoring underwent activity monitoring using a light-weight ear-worn accelerometer (e-AR sensor, Imperial College London) 2 days prior to, and during their investigation. PH was measured and recorded using a conventional naso-gastric catheter and waist worn receiver. Objectively measured activity levels, including subject-specific activity intensity quartiles, were calculated and compared over the 3 days. Physical activity was added to standard test outputs to supplement interpretation and diagnosis.

Results Average patient activity levels decreased by 26.5% during pH monitoring (Range -4.5–51.0%, $p = 0.036$). The amount of high intensity activities decreased by 24.4% (Range -4.0–75.6%, $p = 0.036$), and restful activity increased on average by

Abstract PTU-176 Figure 1

34% although this failed to reach statistical significance (-24.0–289.2%, $p = 0.161$). Some patients exhibited consistent associations between bouts of activity and acidic episodes (Figure 1).

Conclusion The results of this study support the previously reported reduction in activity during ambulatory oesophageal pH monitoring,^{1,2} with the added reliability of objective activity data. In the absence of more pervasive pH monitoring systems (e.g. wireless), quantifying activity changes in the setting of activity-induced reflux might facilitate recalibration of patient DeMeester scores and therefore more appropriate management of GORD.

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PTU-177 DUODENAL ADENOMAS: A REVIEW OF THEIR MANAGEMENT AND THE HIGH RISK OF CO-EXISTING COLON CANCER

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Introduction We reviewed the management of Duodenal adenomas at James Paget University Hospital, Great Yarmouth between 2001 and 2013.

Methods 20 patients were included in this study. A standardised proforma was completed for each case and the information was then collated.

Results A CT scan was performed in 13/20 patients. 3/20 had CT and Endoscopic Ultrasound. 4/20 had no imaging. 14/20 patients had Endoscopic Mucosal Resection (EMR). 5/20 had surgery. 1/20 case was monitored with annual surveillance OGDs. 11/14 patients had EMR within 6 months of diagnosis. Complete resection was achieved in 11/14. Argon Plasma Coagulation (APC) was used in 3/14.

The American Society of Gastroenterology guidelines¹ recommend routine insertion of prophylactic pancreatic stents for patients undergoing EMR of Ampullary adenomas. 6 of our patients had EMR for Ampullary adenoma and only 1 had a Pancreatic stent inserted. However none of these procedures were complicated by Pancreatitis. 4/14 patients had serious complications following EMR. 3 of these had bleeding from the EMR site while one had a large mucosal defect needing Endoclip application. The 30 day mortality was 0. The frequency of long term follow up was in compliance with the Spigelman scoring system.⁵ 4/14 patients had recurrent Duodenal adenomas after EMR.

Various studies have previously demonstrated a high incidence of co-existing Colorectal neoplasms in patients with sporadic Duodenal adenomas.^{2–4} The same was observed in our patients. Of the 17/20 patients who had Duodenal adenomas and intact colons, 11 had a colonoscopy. 3 were found to have Colon cancer, 4 had Colonic adenomas and 1 had hyperplastic polyps.

Conclusion We recommend imaging for all polyps >1 cm. All patients should have EMR within 6 months of diagnosis. Only 1/6 patients who had EMR of ampullary lesions had a Pancreatic stent inserted. None developed Pancreatitis. 4/14 had serious complications following EMR. Long term follow up was in