Results
694 patients (334 male, 340 female), median age 67 (range 21–99), 77% patients over 50. Endoscopy was visually normal in 45%, the commonest visual abnormalities were Oesophagitis (18%) and malignancy (13%). 25% of patients had biopsies. Suspected malignancy or BO were most likely to have biopsies taken (65% and 64% respectively), 9% visually normal endoscopies were biopsied. 83% (49 cases) with suspected malignancy had histological correlation, 17% (11 cases) had BO or Oesophagitis. Three patients were found to have malignancy where the visual diagnosis had been Oesophagitis or benign stricture. Both BO and Oesophagitis had >80% correlation visually and histologically. Six cases of EO were found, all were visually normal. One suspected case was seen at endoscopy, this was histologically normal.

Conclusion
There was generally good correlation between visual and endoscopic diagnosis, particularly in malignancy, however biopsy number was lower than expected. Failure to biopsy may lead to missed diagnosis of cancer or dysplasia. All cases of EO in adults had number was lower than expected. Failure to biopsy may lead to missed diagnosis of cancer or dysplasia. All cases of EO in adults had

Competing interests
None declared.

PTU-223
CARBON DIOXIDE INSUFFLATION DURING ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY MAY REDUCE ABDOMINAL PAIN BUT IT DOES NOT ALTER THE SEEDATION AND ANALGESIA REQUIREMENTS
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Introduction
Compared to air, carbon dioxide (CO2) insufflation during endoscopic retrograde cholangiopancreatography (ERCP) may reduce bowel distension and resulting pain. However, its effect on sedation is unknown. Our objective was to investigate the effect of CO2 insufflation on the amount of sedation, analgesia and anti-spasmodic needed during ERCP. Secondly, the perceived patient discomfort and complications were also examined.

Methods
Using a database, we retrospectively identified 60 patients (pts) each, before and after introduction of CO2 insufflation for ERCP. All procedures were performed using titrating doses of intravenous fentanyl and midazolam combination aiming for a Bispectral Index (BIS) value of 85, which indicates an adequate level of deep sedation. Post ERCP abdominal pain and conscious level was assessed by experienced recovery nurses using a visual analogue scale (VAS) of 0 to 10 and AVPU (Alert, Verbal, Pain, Unresponsive) scale respectively. The statistical analysis for drug doses was carried out using Mann–Whitney U test.

Results
Patient demographics such as age, sex, co-morbidities, indications and ASA grades were similar in both groups. The same median dose of intravenous hyoscine butylbromide (20 mg, p = 0.59) and fentanyl (75 μg, p = 0.70) was used in both groups while the median dose of midazolam was 4.5 vs 4 mg (p = 0.25) for the air and CO2 group respectively. The duration of procedure was 33 vs 29 min (p = 0.63) for the air and CO2 group respectively. During the first hour post procedure, the AVPU score for air group was A-45, V-12, F-7, U-1 and for CO2 group it was A-47, V-13, F-0, U-0 respectively. The incidence of abdominal pain during the first hour post procedure for air and CO2 groups was 10% and 0% (p = 0.027) respectively, while the mean score for pain on VAS in the air group was 2 (range 1–6; p = 0.012, Mann–Whitney U test). Complications included pancreatitis (0% vs 1.3%) and post-sphincterotomy haemorrhage (2.6% vs 0%; p = 0.5, Fisher’s Exact test) in the air and CO2 groups respectively. All complications settled with conservative management. No serious cardio-pulmonary complication was noted in either group.

Conclusion
Carbon dioxide insufflation during ERCP reduces the incidence and severity of post procedure abdominal pain based on VAS but it does not influence the amount of sedation or analgesia required to achieve sufficient palliation of pain during the procedure. The use of CO2 in unselected well sedated, prone patients appears to be safe.

Competing interests
None declared.