Abstract PTU-045 Table

	Sclerosing cholangitis (n = 54)	Controls (n = 54)
Age (yr)	53.5 (27)*	61 (15)*
Male gender	72%*	52%*
Follow-up (mo)	9.5 (13)	10 (9)
General anaesthesia	56%	47%
Sensitivity	50% (35% > 65%)	55% (41–69%)
Specificity	100% (100% > 100%	97% (91% > 100%)
Accuracy	88% (79% > 98%)	80% (68% > 91%)
Adverse events	17.5%	7.5%
Cholangitis	11%*	1.9%*

Data are presented as medians (IQR) and percentage as appropriate. The 95% confidence intervals of operating characteristics are reported. *$p \leq 0.05$.

Conclusion In experienced hands, SOC is equally accurate in cancer diagnosis in SC and patients with single biliary strictures. SOC may be of particular use in the assessment of SC, in which differentiating benign from malignant strictures remains particularly challenging. However, cholangioscope insertion may be hampered by bile duct narrowing and cholangitis is more common following SOC in SC.

Disclosure of Interest None Declared

PTU-046 A RETROSPECTIVE COMPARISON OF PLASTIC, UNCOVERED AND FULLY COVERED METAL STENTS IN THE MANAGEMENT OF DISTAL MALIGNANT BILIARY STRICTURES

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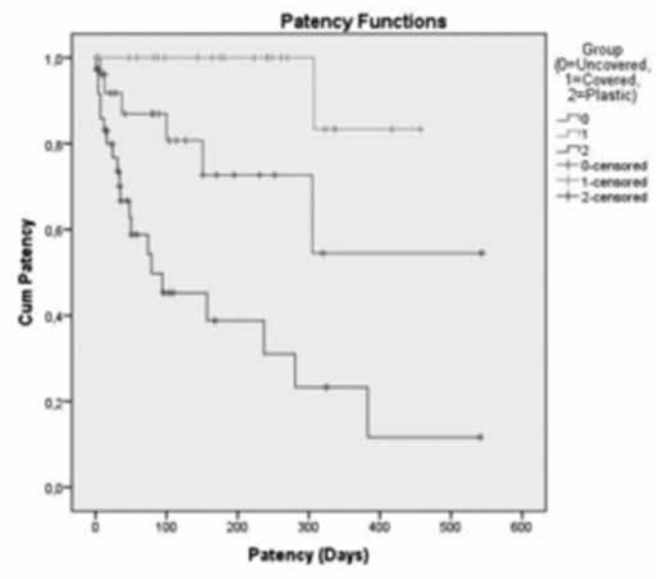
Introduction Uncovered self expanding metal stents (USEMS) are associated with longer patency and reduced complication rates compared to polyethylene stents (PS), for the management of distal malignant biliary strictures (DMBS) [1]. However, PS are used for unstaged tumours, due to difficulties in operative USEMS removal. Fully covered self expanding metal stents (FCSEMS) can be easily removed before or during surgical resection. Recent data supports their use as first line management of DMBS, regardless of resectability status [2]. The current study provides the first retrospective comparison of survival, patency and complication rates between PS, USEMS and FCSEMS in the context of DMBS.

Methods The records of all patients, who underwent endoscopic retrograde cholangiopancreatography and stent placement for newly diagnosed DMBS in our centre, between February 2007 and August 2012 were reviewed. Patients who subsequently underwent surgical resection were excluded from the patient survival estimation. The stent patency period was calculated as the period between stent insertion and occlusion; death or surgical resection with a patent stent. Cumulative patient survival and stent patency were estimated using the Kaplan Meier method. The log-rank test was used for comparison between groups. Fisher's exact test was used for comparison of complication rates. The statistical analysis software used was IBM SPSS Statistics 20.

Results 87 cases were identified: 37 PS (8.5 or 10 Ff), 26 USEMS (wallstent/wallflex) and 24 FCSEMS (wallflex). 7 patients proceeded to surgical resection. Stent occlusion occurred in 54%, 23% and 4.2% of the patients in the PS, USEMS and FCSEMS group respectively, with a mean patency period of 87, 144 and 196 days. Cumulative patency was higher in the FCSEMS vs USEMS group ($p = 0.028$) and higher in both groups compared to the PS group ($p < 0.001$ and $p = 0.007$ respectively) [Fig1]. No statistically significant difference was observed in survival or complications between the 3 groups. However, 6 episodes of cholangitis occured in the PS group vs 1 episode in each of the FCSEMS and USEMS groups; 2 episodes of pancreatitis were noted in the FCSEMS group vs none in the other groups.



Abstract PTU-046 Figure

Conclusion The use of FCSEMS as first line management for DMBS is associated with longer patency and similar complication rates compared to USEMS and PS. However, the risk of pancreatitis requires further assessment.

Disclosure of Interest None Declared

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PTU-047 MANAGEMENT OF POLYP CANCERS WITHIN THE BOWEL CANCER SCREENING PROGRAMME COULD BE IMPROVED!

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Introduction Endoscopic management of early colonic neoplasia or polyp cancer remains unclear. There are no national guidelines or good quality data to guide clinicians with these difficult lesions. The aim of this study is to identify the incidence of early cancer and variation in practise of managing these lesions

Methods Data was prospectively collected in all patients undergoing screening within the Solent BCSP. The database was interrogated to identify all neoplasia. The endoscopists suspicion of cancer was noted from the reports. MDT outcome was recorded, along with final management of the cancer

Results In total 3976 patients underwent screening colonoscopy between 2007 –2012. N = 5768 neoplastic polyps found giving a mean polyp detection rate of 1.5/patient. Cancer was found in 235/3976 (6%) patients. Mean age was 67yrs. 142/235 (60%) were male. 145/235 (62%) had advanced cancer, confirmed at surgery.

90/235 (38%) patients had polyp cancer. 83% of them in rectosigmoid.

(1) 13/90 were pedunculated polyps (mean size 23 mm, range 12–35 mm)

(2) 77/90 were flat polyp cancers (mean size 24 mm, range 8–80 mm)

See table 1 below

13/13 pedunculated polyp cancers were endoscopically resected. In 6/13 cases cancer was suspected prior to resection. Histology was reported accurately on 12/13 (92%) polyp cancers using Haggitt classification. 1/13 required surgery due to invasive features on histology.

30/77 (39%) of flat or sessile polyp cancers were endoscopically resected. Endoscopist suspected cancer in only 13/30 (43%) cases prior to resection. Histology was reported confidently by Kukuchi levels in 19/30 (63%) of lesions. 9/19 required surgery due to invasive features on histology. In 11/30 (37%) cases the histology report was inconclusive due to a poor quality EMR specimen. This led to surgery in all 11 patients but no residual disease or LN involvement was found.

Abstract PTU-047 Table 1 Breakdown of polyp cancer size and morphology

Size(mm)	Pedunculated	Flat	Total
0–10	0/13	17/77	17/90
	0%	22%	19%
11–20	6/13	27/77	33/90
	46%	35%	37%
> 20	7/13	33/77	40/90
	54%	43%	44%

Conclusion

1. The in-vivo endoscopic diagnosis of cancer prior to resection is suboptimal and can be improved
2. Post EMR histology reporting is inconclusive in a large proportion of flat polyps leading to unnecessary surgery
3. Clinical care could be improved by optimising in-vivo diagnostic skills and resecting large flat lesions in single piece by ESD.

Disclosure of Interest None Declared

PTU-048 THE EFFECT OF THE COLONOSCOPE MAGNETIC IMAGING DEVICE (SCOPEGUIDE ®) ON IMPLANTABLE CARDIAC DEVICES

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Introduction Use of the colonoscope magnetic imaging device (ScopeGuide®, Olympus) is currently contraindicated by the manufacturer for patients with implantable cardiac devices. This group of patients is increasing every year, as is the number of colonoscopies being performed. This is the first study which examines the safety of ScopeGuide® in patients with permanent pacemakers (PPMs), implantable cardioverter defibrillators (ICDs) and cardiac resynchronisation therapy (CRT).

Methods Before any patient experiments, ex-vivo proof of concept studies were performed. Non-implanted devices were exposed to the electromagnetic field (EMF) of ScopeGuide® and monitoring demonstrated no evidence of interference or change in settings. Following this, ethical approval was obtained and consecutive patients attending device cheque clinics were prospectively recruited and exposed to ScopeGuide® EMF. After an initial device cheque, patients were attached to a device programmer and underwent continuous external cardiac monitoring. A colonoscope was placed curled on the abdomen over their clothing with patients lying supine to simulate the EMF generated during colonoscopy. The colonoscope was connected to ScopeGuide®. After 2 minutes of observation to assess for any interference, ScopeGuide® was disconnected and devices were checked for any change in settings.

Results 143 patients were invited to participate and of these 70 were recruited to take part in the study (46 male, 24 females, mean age 68.5 years SD 10.3). Device type, indication and manufacturer are summarised in Table 1. No evidence of interference was seen on device leads nor was any change in programming detected following exposure to ScopeGuide® EMF in any patient.

Abstract PTU-048 Table 1 Summary of baseline characteristics of recruited patients

Sample Size	M:F (total) Mean age (range, SD)	46:24 (70) 68.5 (30–80, 10.3)
Indications	Complete heart block	12
	1°, 2° or trifasicular block	12
	Tachybradyarrythmia	9
	Sick sinus syndrome	5
	Sinus bradycardia	4
	Dilated cardiomyopathy	10
	Others (IHD, VT/VF, AF, Syncope)	18
Device Type	PPM	45
	ICD	14
	CRT (Pace only : Defibrillator)	11 (6:5)
Manufacturer	Boston Scientific	31
	Meditronic	37
	Other	2

Conclusion The ScopeGuide® does not cause any interference or change in settings and appears to be safe to use in patients with implantable cardiac devices.

Disclosure of Interest None Declared

PTU-049 ENDOSCOPIC RESECTION AND STEPWISE ENDOSCOPIC ABLATION FOR EARLY NEOPLASIA IN BARRETT'S OESOPHAGUS: OUTCOME IN A LARGE OESOPHAGUS CANCER CENTRE

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Introduction Endoscopic mucosal resection (EMR) followed by radiofrequency ablation (RFA) is now considered standard for treatment of high grade dysplasia (HGD) and intramucosal cancer in Barrett's oesophagus (BE). Complete ablation of the Barrett's epithelium is recommended to reduce the risk of metachronous neoplasia. However, RFA is an expensive treatment modality, often requiring repeat procedures and endoscopic surveillance thereafter and may not be necessary in all patients.

Methods We analysed our database of oesophageal EMR procedures performed for HGD or early cancer from 2008 to 2012. Patients' demographics, Barrett's length, histology, number of procedures, remission and complication were assessed. All patients referred for endoscopic treatment of early Barrett's neoplasia were investigated using EUS to exclude obvious infiltration of deeper structures. EMR was performed using band ligation mucosectomy. Patients were followed up 3 monthly with endoscopy and EMR repeated as required. If no dysplasia was found after a year, follow up interval was increased to 6 months.