

Abstract OC-109 Table 1

Parameter	Strain ratio				Mass elasticity			
	* $\geq 4.62$	† $\geq 6.04$	‡ $\geq 15.41$	§ $\geq 59.25$	‡ $\leq 0.03\%$	§ $\leq 0.037\%$	† $\leq 0.05\%$	* $\leq 0.27\%$
Cutoff								
Prevalence (%)	105/108 (97.2)	100/108 (92.6)	76/108 (70.4)	15/108 (13.9)	34/108 (31.5)	37/108 (34.3)	44/108 (40.7)	100/108 (92.6)
Sensitivity (%)	100.0	94.5	78.0	16.5	37.4	40.7	46.2	95.6
Specificity (%)	17.6	17.6	70.6	100.0	100.0	100.0	88.2	23.5
PPV (%)	86.7	86.0	93.4	100.0	100.0	100.0	95.5	87.0
NPV (%)	100.0	37.5	37.5	18.3	23.0	23.9	23.4	50.0
Accuracy (%)	87.0	82.4	76.9	29.6	47.2	50.0	52.8	84.3

\*Internally-derived optimal cutoff for accuracy.  
 †Optimal cutoff for accuracy (and sensitivity) derived by Iglesias-Garcia *et al.*  
 ‡Optimal cutoff for specificity derived by Iglesias-Garcia *et al.*  
 §Internally-derived optimal cutoff for specificity.

**Competing interests** None declared.

**REFERENCE**

1. **Iglesias-Garcia, et al.** *Gastroenterology* 2010.

reserved for complex cases, as it is not always effective for pain relief, and when there is a diagnostic dilemma.

**Competing interests** None declared.

**OC-110 SINGLE CENTER EXPERIENCE OF GROOVE PANCREATITIS**

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**Introduction** Groove pancreatitis (GP) is a form of chronic segmental pancreatitis. Due to increased awareness of the condition, a greater number of cases have been reported in recent years. Clinical symptoms are heterogeneous, with abdominal pain and gastric outlet obstruction considered the most common, and can mimic pancreatic adenocarcinoma. Most of the published literature is represented by small series. Aim of the study is to describe our experience in the management of this condition.

**Methods** From January 2005 to December 2011, 47 patients with GP were treated in our Unit. 33 males (M:F=2.3:1); mean age was 50 (31–84), average number of hospital admissions was 4 (0–20), mean hospital stay was 10 days (1–82). Eight patients needed HDU/ICU support. Aetiology was alcohol in 41 (87%) and 13 were abstinent for more than 6 months at last follow-up. Amylase was elevated (3xN) on admission in 22. The most common feature was abdominal pain (n=40, 85%) and 50% (n=20) required daily use of opioids. Gastric outlet obstruction (n=7), jaundice (n=11) and acute renal failure (n=5) were less frequent. Exocrine insufficiency was present in 23 (49%). 13 had a dilated pancreatic duct (>5 mm) and 6 developed portal hypertension. Median follow-up was 34 months.

**Results** There were five deaths, one due to GP. 29 patients were treated conservatively; 11 required enteral feeding. 4 had ERCP and biliary stenting, two of which subsequently underwent biliary reconstruction. One patient had a pancreatic stent and then a Berne's procedure. Endoscopic drainage for pseudocyst (n=2), cholecystectomy (n=6) for sludge/stones, gastric bypass (n=3), Puestow procedure (n=1), Whipple's operation (n=4, two of which later required thoracoscopic splanchnicectomy—TS), TS (n=3), celiac plexus block (n=2) were the other interventions. Overall 28 (66%) patients are well with no or occasional use of analgesia, six patients still experience recurrent hospital admissions and 8 require regular use of analgesia but with improved symptoms.

**Conclusion** The majority of GP is caused by alcohol excess. GP can be effectively treated conservatively and pain (the most common symptom) managed with simple analgesia. Despite good support the majority remain addicted to alcohol. Radical surgery should be

**OC-111 CHARACTERISATION OF T-HELPER AND T-REGULATORY CELLS IN CHRONIC PANCREATITIS**

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**Introduction** It is suggested that T-lymphocytes play a role in the pathogenesis of chronic pancreatitis (CP), but little is known about the composition of T-cell subsets in this disease and previous studies have been discordant.<sup>1–4</sup> We therefore aimed to characterise T-helper (Th) and T-regulatory (Treg) lymphocytes in CP tissue and peripheral blood.

**Methods** Peripheral blood mononuclear cells were isolated from 15 patients with CP (all male, median age 48.2 years) and 14 controls (10 male, four female, median age 56.1 years). Mononuclear cells were also isolated from the pancreatic tissue of four CP patients (all male, median age 41 years) using enzymatic and mechanical digestion, followed by density gradient centrifugation. The mononuclear cells were stimulated with PMA and ionomycin (not Treg cells), and analysed using a FACSAria flow cytometer. Live CD3<sup>+</sup>CD4<sup>+</sup> Th1, Th2, Th17 and Treg cells were identified as IFN- $\gamma$ <sup>+</sup>, IL-13<sup>+</sup>, IL-17<sup>+</sup> (IFN- $\gamma$ <sup>±</sup>), and CD25<sup>+</sup>FoxP3<sup>+</sup>CD127<sup>lo/-</sup> respectively. Statistical analysis was performed using a Mann–Whitney U Test.

**Results** The peripheral blood of CP patients comprised a significantly higher percentage of Th1 cells (15.2% vs 8.11%; p=0.03), Th2 cells (2.00% vs 1.17%; p=0.03), Th17 cells (1.23% vs 0.41%; p=0.003), dual secreting IFN- $\gamma$ <sup>+</sup>IL-17<sup>+</sup> Th17 cells (0.11% vs 0.03%; p=0.003) and Treg cells (6.30% vs 4.40%; p=0.05) compared to controls. CP patients who consume excess alcohol have significantly more Th1 cells than non-drinkers (23.7% vs 9.81%; p=0.01). The T-helper cell infiltrate in CP tissue was mainly composed of Th1 cells (26.1%–57.2%, median 41.5%). Th17 cells were also seen (0.95%–3.80%, median 2.1%), including IFN- $\gamma$ <sup>+</sup>IL-17<sup>+</sup> Th17 cells (0.22%–2.39%, median 0.37%). No discernible Th2 cells were identified and few or no Treg cells were seen in CP tissue.

**Conclusion** This work is the first to demonstrate a significant increase in the number of Th17 cells in the peripheral blood of CP patients, and to clearly demonstrate that Th1 cells are the principal T-helper cell found in CP tissue along with appreciable numbers of Th17 cells. Interestingly there is no polarisation of the peripheral blood T-helper cell response in CP towards either a Th1 or Th2 phenotype. It appears therefore that the blood of CP patients is primed to respond non-specifically to inflammatory stimuli.