Abstract PTH-138 Table 1

Angiogenic factor	Patient mean	Patient range	Control mean	Control range	P value
Ang-1	13071	615–43833	21169	2253–56010	<0.004
Ang-2	4600	842–11767	2973	792–7995	<0.001
TNF	6.7	1.97–16.94	12.2	1.73–42	<0.003
Mean ratio	1.05	0.06–9.26	0.29	0.06–1.74	0.049
Ang-2/Ang-1					

angiogenic cascade, although the exact mechanism remains elusive. Previous research we have undertaken has associated elevated serum angiopoietin-2 (Ang-2) levels with angiodysplasia. Ang-1 and Ang-2 are ligands of the endothelial receptor tyrosine kinase Tie-2. Ang-1 regulates endothelial cell survival and blood vessel maturation and plays a key role in maintaining vascular integrity. Ang-2 is a functional antagonist of Ang-1. Inflammation and angiogenesis are associated with several pathological disorders and previous data suggests a TNF- α dependent dual functional roles of Tie2 in inflammatory angiogenesis

Methods Following informed consent, serum samples were collected from patients with a definite diagnosis of sporadic small bowel angiodysplasia (P2) on capsule endoscopy, and from healthy controls in which GI bleeding had been out-ruled by a negative faecal immunochemical test. Serum levels of Ang-1, Ang-2 and TNF- α were measured using commercially available ELISA kits. All results were expressed as a mean and compared between patients and controls, and the mean of the ratio of ang2/ang1 levels for each group was calculated.

Results A total of 80 samples were analysed for each factor, including 40 patients (48% male, average age 71 years) and 40 controls (43% male, average age 70 years). As expected and in keeping with our previous work levels of Ang-2 were significantly higher in patients (mean 4600 pg/ml) than in controls (mean 2973 pg/ml) $p < 0.001$. In addition levels of Ang-1 were significantly lower in the patient group (mean 13071 pg/ml) vs. controls (mean 21169 pg/ml) $p < 0.004$ (Table 1). We also found that levels of TNF- α were significantly lower in the patient group (mean 6.7 pg/ml) vs. controls (mean 12.2 pg/ml) $p < 0.003$. The mean of the ratio of Ang2/Ang1 levels was found to be significantly higher in patients (1.05) vs. controls (0.29) $p < 0.05$.

Conclusion Ours is the first study to have identified a link between angiopoietin 1 and 2 ratios and gastrointestinal angiodysplasia. The TNF- α findings are also novel and would strongly suggest a role for inflammatory mediated angiogenesis in this condition.

Disclosure of Interest None Declared.

PTH-139 LONG ACTING OCTREOTIDE THERAPY HAS A BENEFICIAL EFFECT IN PATIENTS WITH SIGNIFICANT SMALL BOWEL ANGIODYSPLASIA

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Introduction Angiodysplasias account for up to 50% of causes of small bowel bleeding and due to their relative inaccessibility and the intermittent nature of their bleeding they present a particular therapeutic challenge. Endoscopic ablation with APC is the most efficacious at reducing re-bleeding rates, however; its effect is short-lived and not all small bowel lesions are amenable to treatment via DBE. It has been suggested by a recent small trial that long-acting Octreotide may be beneficial at reducing re-bleeding rates.

Abstract PTH-139 Table 1

	Hb pre-Rx	Most recent Hb	Re-bleeding episodes
Overall	8.7 g/dL	11.2 g/dL	5
Octreotide only	8.6 g/dL	11.1 g/dL	2
APC and Octreotide	9 g/dL	11.5 g/dL	3

Methods Following ethical approval patients with significant recurrent anaemia (≥ 6 months with RCC transfusions) and definite small bowel angiodysplasia (P2), on capsule endoscopy were invited to participate in an open label, uncontrolled pilot study of monthly 20 mg long acting Octreotide. Patients who had lesions amenable to APC via DBE were treated prior to commencing Octreotide. Baseline demographics, medications, endoscopy and capsule findings and Hb level were recorded. Patients were assessed at regular intervals and evaluated for side effects and episodes of bleeding (defined as either overt bleeding or a Hb drop of >1 g/dL). Patients who received fewer than three doses were excluded from analysis.

Results A total of 22 patients, 50% ($n = 11$) female, mean age of 72 years (range 55–92) have been recruited to date, 16 (73%) with isolated small bowel angiodysplasias and 6 with small bowel and colonic lesions. Of these, 17 (77%) received at least 3 doses, 11 (65%) had DBE and APC prior to commencing Octreotide, and 11 (65%) were on anticoagulants (4 warfarin, 7 aspirin and 2 dual antiplatelet therapy with aspirin and clopidogrel). The mean duration of treatment was 8.1 months (range 3–15). There was a statistically significant difference in mean baseline and follow up Hb levels, 8.7 g/dL (5–11.1) and 11.2 g/dL (8–14.3) respectively, $p < 0.001$. Overall there were 8 re-bleeding episodes in 5 patients (29%). Prior APC treatment did not affect outcome (Table 1). Significant side effects occurred in 3 patients (13.6%), 1 allergic skin reaction, 1 thrombocytopenia and 1 choledocholithiasis.

Conclusion Our study has shown that long acting intramuscular Octreotide is effective at improving Hb levels in patients with refractory small bowel angiodysplasias. A longer follow up interval will be required to determine the beneficial effect of combination therapy. We have identified a relatively high rate of serious side effects, in contrast to previous reports, which need to be taken into consideration prior to commencing treatment.

Disclosure of Interest None Declared.

PTH-140 SOLUBLE PLANTAIN FIBRE INHIBITS THE EPITHELIAL ADHESION OF DIARRHOEAL PATHOGENS CLOSTRIDIUM DIFFICILE, SALMONELLA AND ENTEROTOXIGENIC E. COLI (ETEC) THROUGH INTERACTION WITH THE INTESTINAL EPITHELIUM

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