**PTU-158** **BOTULINUM TOXIN USE IN OESOPHAGEAL DYSMOTILITY**

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Introduction Oesophageal dysmotility represents a treatment challenge, with many patients refractory to medical management. There is a lack of evidence for the treatment of oesophageal dysmotility, with only a handful of studies into the use of Botulinum Toxin (Botox) injections, the largest being of 29 patients in 2002. Our retrospective, multi-centre study assessed the efficacy of Botox injection for oesophageal dysmotility in the South West of England.

Methods The pharmacy databases in three hospitals were interrogated for Botox released to the gastroenterology departments, between January 2009 and December 2013. Then electronic endoscopy databases were utilised to identify those patients treated for oesophageal dysmotility. Patients with achalasia were excluded. Clinical notes were reviewed looking at prior investigations, treatments and presenting symptoms. The numbers of treatments, symptom improvement, duration of response and morbidity or mortality associated with treatment were also assessed.

Results Forty-three patients with oesophageal dysmotility were treated with Botox (mean age 69 years, range 23–93), with a mean of 2.8 treatments per patient (range 1–19). The main presenting symptom was dysphagia (n = 38), either alone or with chest pain, vomiting, reflux or regurgitation. All patients had failed at least one pharmacological treatment, with 11 patients having tried over three different treatments, prior to Botox.

A good treatment response was reported by 56% (n = 24) of patients with their first injection. There was a variable duration of response, from three months to five years, with an average response of 12 months. In 25% (n = 6) of patients with a good initial response, further treatments were not as effective. There were a variety of injection techniques used, by different endoscopists, with no obvious difference in success rates between the techniques. There were no immediate post-procedure complications. Four patients died within 30 days of Botox injection, all of whom were on an end of life pathway.

Conclusion Botox can be a useful treatment in oesophageal dysmotility; however, careful patient selection is important. Further research is needed into the most effective injection technique and whether there are any patient predictors of response.

**REFERENCE**


Disclosure of Interest None Declared.

**PTU-159** **VARIABLE UTILITY OF CHROMOGRAFIN A ASSAYS IN THE DIAGNOSIS OF GASTRIC CARCINOID TYPE 1**

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Introduction Chromogranin A (CgA) is used in the diagnosis and follow-up of patients with neuroendocrine tumours, whilst there is debate over the accuracy of CgA assays in gastric carcinoid type 1 (GC1). Clinical interpretation of CgA results may be affected by the heterogeneity between available assays. The commercial CgA assay, DAKO (DAKO, Denmark A/S, Glostrup, Denmark) is an ELISA which recognises a 23 kD C terminal fragment of CgA; the Imperial Supra-regional Assay Service radioimmunoassay (SAS Hammersmith Hospital, Imperial College, London) is a competitive radioimmunoassay raised against the whole pancreaticatin molecule. Present study is aimed at comparing CgA-DAKO and CgA-SAS to determine their accuracy in the diagnosis of GC1.

Methods Patients with a confirmed diagnosis of GC1 and available plasma CgA measurements according to two different assays (SAS, DAKO) were included and retrospectively reviewed. CgA values were ranked in 4 groups: 1. normal values, 2. increase <2 upper limit of normal (ULN), 3. increase between 2–5 ULN, 4. increase >5 ULN.

Results 26 patients, 17 female and 9 male, mean age 55 years ± 11.75, were identified. At diagnosis, median CgA-DAKO were significantly higher than median CgA-SAS (81, normal range <27 IU/l versus 34.5 pmol/l, normal range <60 pmol/l, T = 35.5, p < 0.001). When ranking the data, the results confirmed median CgA-DAKO significantly higher than median CgA-SAS: 3 vs. 1, T = 0, p < 0.001. Sensitivity was 77% and 7.7% for CgA-DAKO and CgA-SAS, respectively.

Conclusion CgA-DAKO shows a better sensitivity than CgA-SAS for the diagnosis of GC1. Accurate diagnostic biomarkers may identify those patients who may benefit from a closer endoscopic follow-up in cases of raised neuroendocrine markers. Further prospective studies are needed highlighting the difference in diagnostic sensitivity between assays.

**REFERENCES**


4 Ardill JES. Circulating markers for endocrine tumours of the gastroenteropancreatic tract. Annals of Clinical Biochemistry 2008:45, 539–559

Disclosure of Interest None Declared.