

First Experience Of Spiral Enteroscopy In The UK: Let's "Torque" About It!

E. J. Despott*¹, S. Hughes², P. Marden², C. Fraser¹

¹The Wolfson Unit for Endoscopy, St Mark s Hospital, Imperial College, London,

²Gastroenterology Dept., North Bristol NHS Trust, Bristol, United Kingdom

Abstract

INTRODUCTION: Small bowel (SB) endoscopy is enjoying a significant renaissance. In addition to balloon assisted enteroscopy (BAE) using double or single balloons, the novel technique of spiral enteroscopy (SE) has recently been reported. This uses a flexible over-tube threaded with a pliable plastic spiral (Spirus Endoease Discovery SB, Spirus Medical, MA, USA) to grip the small bowel. Rotational torque applied by the operator is converted into plication of the SB over the over-tube as the enteroscope advances. Early data suggests that the procedure may be easier to learn and faster than BAE.

AIMS & METHODS: We report our initial experience of SE since its introduction to the UK in November 2008.

RESULTS: 21 procedures (12 male) were done at 2 tertiary referral centres. Mean age was 59 years (19-81 years). 11 procedures were done under conscious sedation while the remaining 10 were under general anaesthesia. 20 procedures were performed via the oral route; 1 procedure was done via the rectal route. Carbon dioxide was used as an insufflating gas in 11 procedures while air was used for the others. The most common indication for SE was mid-gut bleeding (n=16). Other indications included SB polyposis (n=4) and direct percutaneous endoscopic jejunostomy (DPEJ) feeding tube replacement (n=1). 20 procedures were continued to the maximal point of insertion until forward advancement of the enteroscope ceased. One oral procedure was abandoned despite a 14 hour fast as stomach contents were present. Mean duration of procedures was 43±14 minutes. In one patient, where the spiral engaged the SB throughout the procedure, pan-enteroscopy was achieved in 65 minutes. In the patient undergoing rectal SE, SB intubation distance was estimated to be 50cm proximal to the ICV. 7 patients were treated with argon plasma coagulation for angioectasias and 1 patient had multiple polypectomies. No significant complications occurred in the series. The main limitation to SE was related to occasional inability of the spiral to engage the SB. This led to the SE failing to reach the location of a proximal ileal polyp in 1 patient (subsequently reached by DBE in the same session). In another 2 patients, the SE failed to reach the location of SB tattoos placed at previous DBEs.

CONCLUSION: Our initial experience with SE suggests that in patients where SB engagement readily occurs, deep intubation distances can be achieved in a relatively short time. The SE device also appears anecdotally to provide an excellent stable platform for therapeutic interventions. Further studies comparing BAE and SE would be helpful.