

# FEASIBILITY, SAFETY, AND OUTCOMES OF UGI ENDOSCOPIC SUBMUCOSAL DISSECTION FROM UK ESD REGISTRY: THE LARGEST MULTICENTRE PROSPECTIVE STUDY ON WESTERN POPULATION

## Introduction

The outcome of ESD in early gastrointestinal neoplasia in Japan is well established whereas in the west, it is variable depending on the volume and experience. Therefore, a multicentre national registry was set up in the UK to prospectively evaluate the practice and outcomes of ESD.

## Methods

This is a prospective observational study for patients undergoing ESD for early GI neoplasia.

## Results

There were 451 UGI ESDs recruited between 2016 to 2023 from 6 large tertiary referral centres in the UK. Mean age of the patients was 70.8 years (range: 24-94) with male preponderance (318 males vs. 133 females). Majority were in oesophagus: 282 (62.53%), stomach: 159 (35.25%) and duodenum: 10 (2.22%).

Of 282 oesophageal ESDs, 277 (98.23%) were technically successful with 96% en-bloc rate. There were 3 intraprocedural complications (2 oesophageal perforations and 1 oral laceration from overtube). All were managed endoscopically. There were 29 (10.28%) post ESD strictures requiring endoscopic dilatations. 3 (1.06%) delayed bleeding were noted and 3 were readmitted for decompensation of underlying co-morbidities.

There were 44 squamous cell carcinoma (SCC), 26 gastro-oesophageal junctional neoplasia and 8 others (submucosal lesion and granular cell tumours). Of 44 SCC, there were 8 pT1b (5 achieved deep R0, 7 achieved lateral R0), 10 pT1a (all achieved both deep and lateral R0), 22 HGD (81.8% achieved R0), 3 LGD (all achieved R0).

There were 160 gastric ESDs with completion rate of 96.25% and en-bloc rate of 95.5%. There were 8 (5%) intra-procedural perforation which required endoscopic clippings. There were 7 (4.36%) delayed bleeds which were managed endoscopically. Of 160 cases, 138 were epithelial neoplasia, 11 were submucosal lesions while 4 were large hyperplastic polyps. Of 138 epithelial neoplasia, 10 had deep SM invasion (7 achieved deep R0, 8 lateral R0), 14 pT1bSM1 (7 achieved deep R0, 10 lateral R0), 50 pT1a (90% achieved deep R0, 80% lateral R0), 35 HGD (94.3% R0) and 27 LGD (77.8% R0).

## Conclusion

Unlike in the East, most ESDs in our study were performed in the oesophagus rather than the stomach. Our data demonstrates the feasibility and safety of UGI ESD in Western setting with very low complication rates without requiring surgical intervention. We found that deep submucosal invasion is a strong predictor of poor R0 rate.