

Duodenal Brunner's Gland Cyst presenting with a false "target sign": a case report

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Introduction

Small intestine polyps are usually visualized in the first two parts of duodenum¹. Endoscopic resection at this site can be challenging due to complications such as perforation². The 'target sign'³ is useful for identifying perforation and consists in a bullseye image (concentric circles) in the submucosal side of the resected specimen. We report an unusual entity presenting itself as a sessile polyp in the bulb, which was submitted to endoscopic resection and presented a false 'target sign'.

Case description

A 63-year-old man with Barrett's oesophagus underwent his regular surveillance endoscopy. Incidentally, there was a 10 mm sessile polyp in the duodenal bulb (figure 1). The lesion was lifted with submucosal injection and resected entirely. Upon inspection of the resection base a mirror 'target sign' was found (figure 2). Examination of the resected specimen revealed the 'target sign'. The base was closed with endoscopic clips. The patient was clinically well, tolerated diet immediately post-procedure and did not require hospital admission.

Microscopic examination (figure 3) demonstrated a multilocular cystic lesion predominantly in the submucosa and muscularis mucosae. The cyst was lined by cytologically bland columnar and focally flattened mucin secreting cuboidal epithelium. The lining epithelium was free of dysplasia or adenomatous elements and merged with adjacent Brunner's glands.

Despite signs found on both the specimen and base of the resected region, there was no evidence of muscularis propria on histology.

Take home message

Although we should consider the possibility of muscular injury when the 'target sign' is found, this case demonstrates that a false target sign can occur.

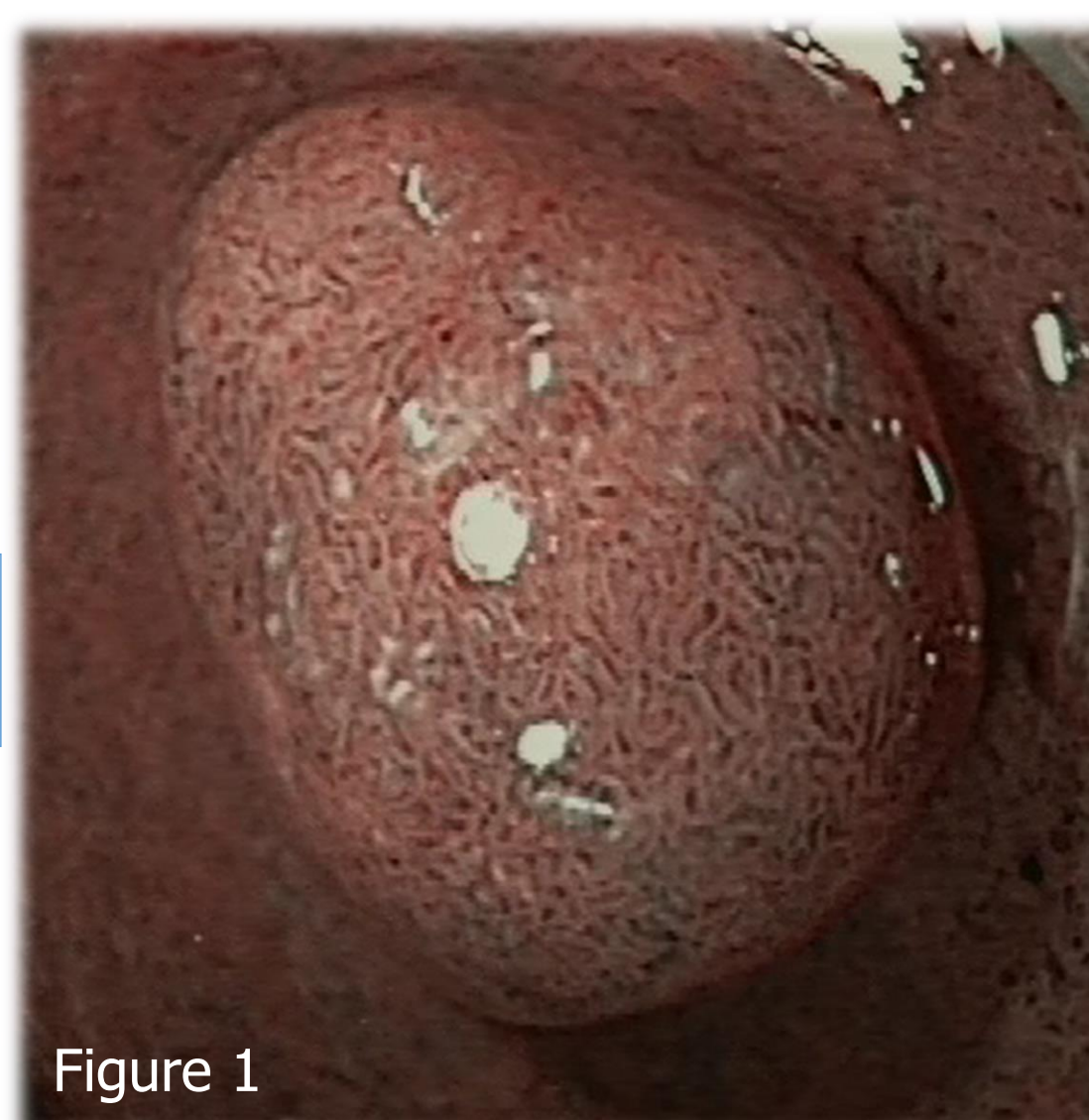


Figure 1

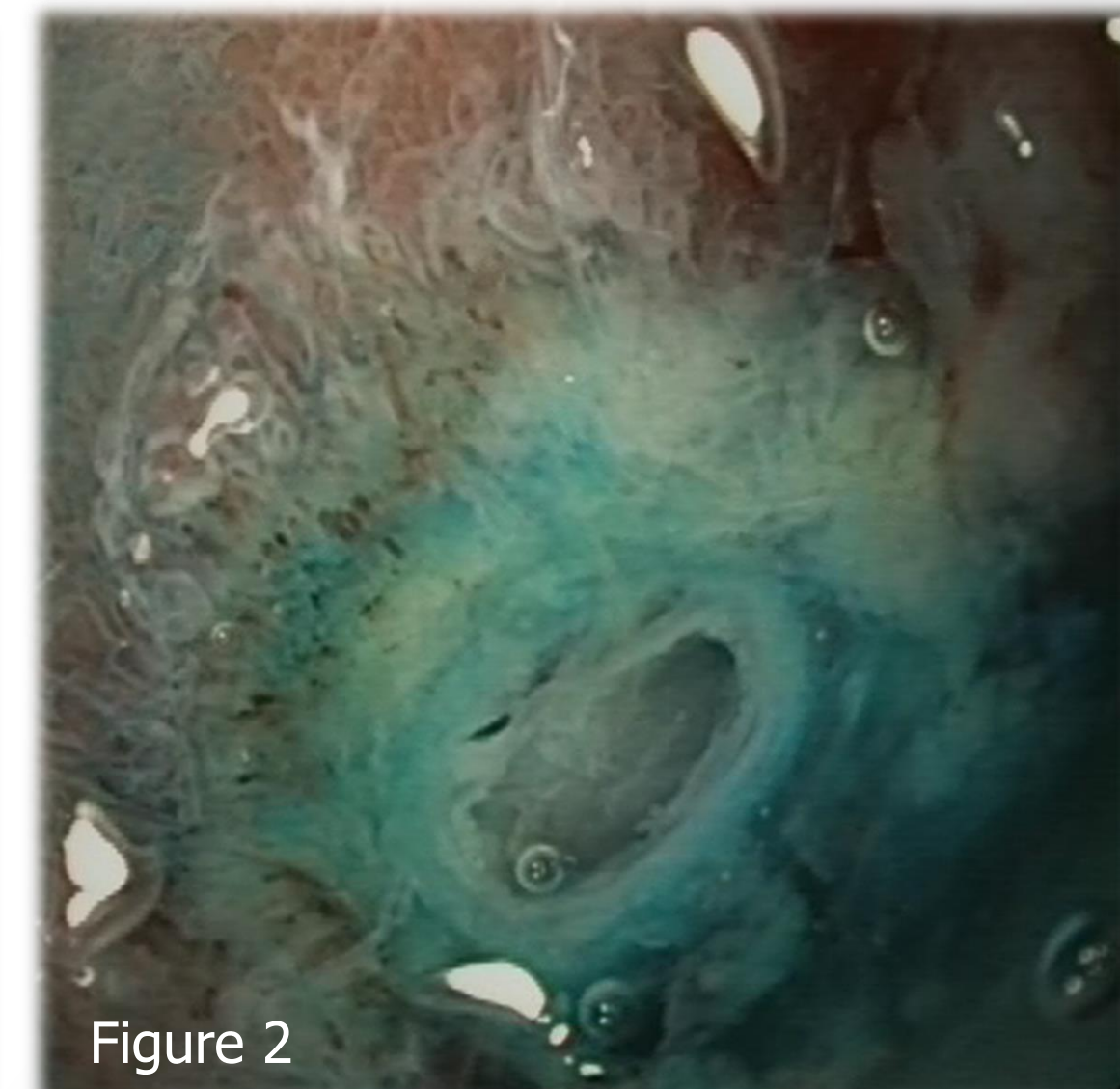


Figure 2

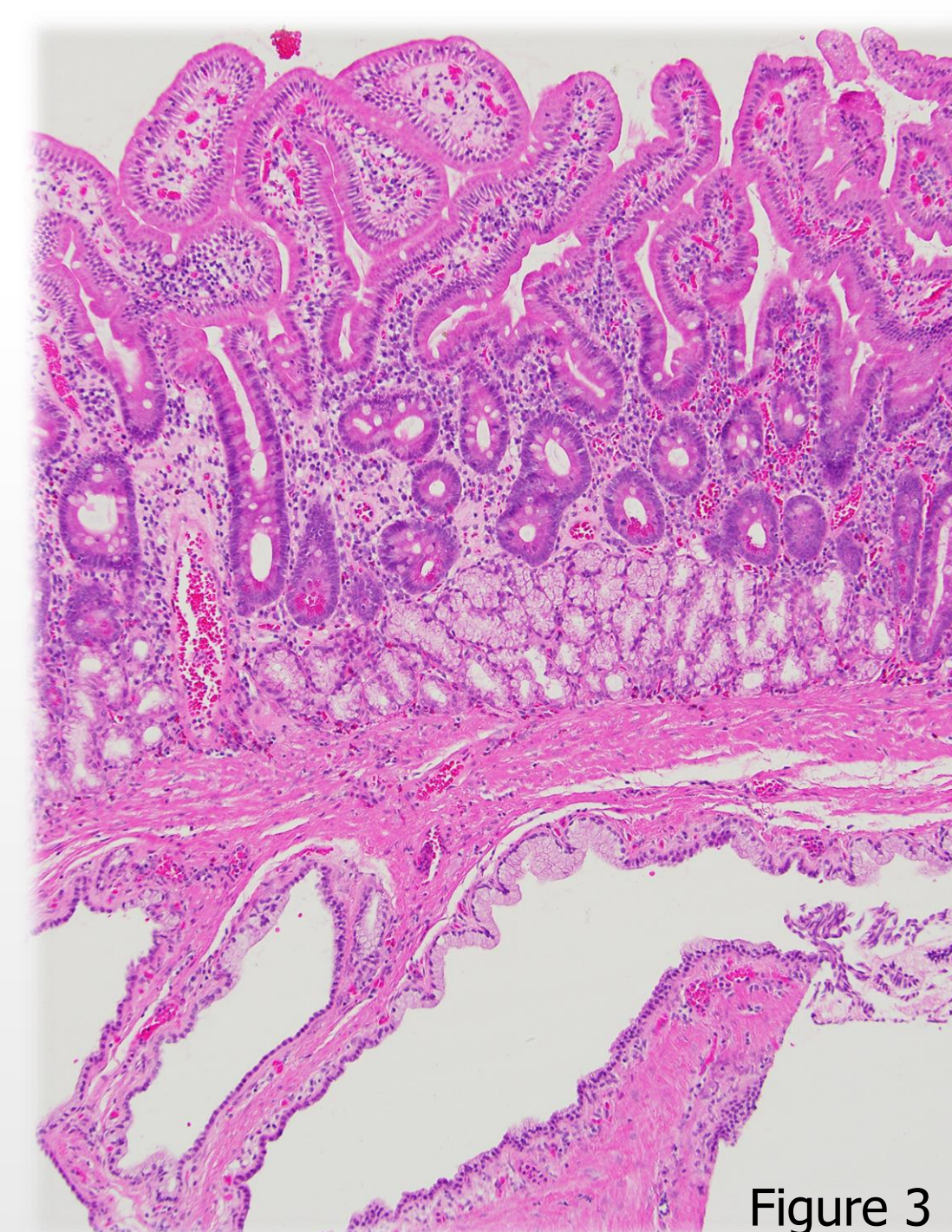


Figure 3

References

1. Chathadi KV et al., GIE 2015
2. Marques J et al., WJGE 2015
3. Swan MP et al., GIE 2011

Acknowledgements

Dr. Pu was supported by the University of Adelaide with expenses for the submission of abstracts, printing fees of posters and overall with the Beacon of Enlightenment scholarship. Ferring Pharmaceuticals supported the attendance through the registration fees.