

Retention of Small Bowel Video Capsule Endoscopy- Experience of an Irish Tertiary Referral Centre

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Introduction

Small bowel capsule retention is rare, approximately 2%, defined as visible retention on plain film of abdomen (PFA) after 14-days. Currently PFA is performed if the capsule is not seen to reach the large bowel during recording. Alternatively, for upper-gastrointestinal (UGI) capsule studies, risk of retention is determined if the capsule fails to reach the small bowel during recording.

Aim

Given the similar physical specifications of the capsules (Medtronic) used, we hypothesize whether 14-day PFA is no longer required for small bowel capsules not observed in the large bowel.

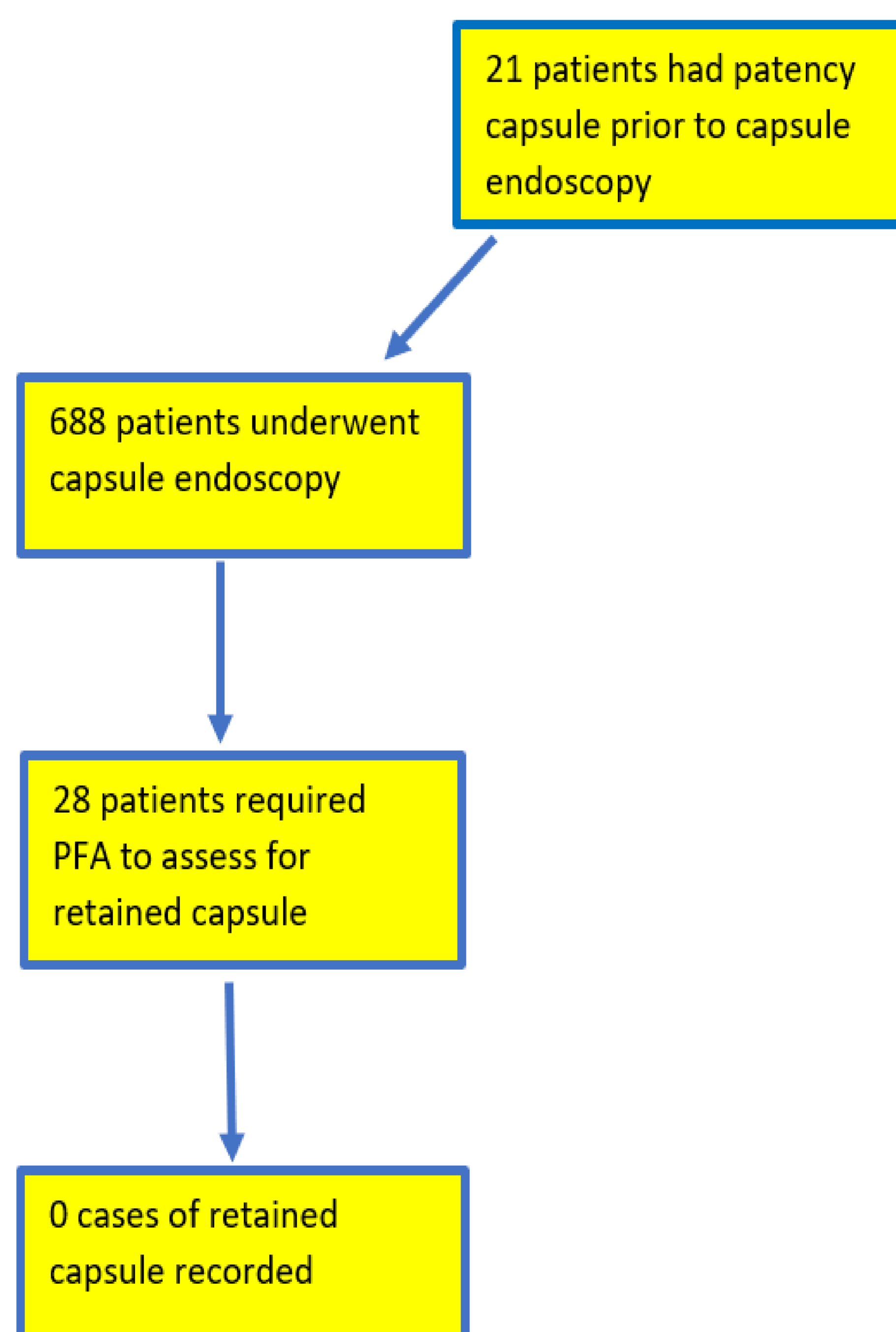
Method

The use of patency capsule in our lab allows careful selection of small bowel capsule studies to minimise risk of retention. All PFAs performed over a 5-year period were reviewed to determine if careful selection and use of patency capsule negates the need for capsule retention PFA screening.

Results

688 small-bowel capsules were performed during the study period
3% had prior patency capsule.
31 PFAs with a query of capsule retention were performed during the study period on 28 patients. This included 15 females, and the median age was 53.5 years.

None of the films demonstrated evidence of capsule retention.



Discussion

Our data suggest that 14-day PFA may no longer be required for capsules not seen to reach the large bowel.

Advice regarding symptoms of capsule retention and precaution with magnetic resonance imaging, similar to current UGI capsule advice, may suffice.

This may reduce the burden on radiology imaging slots and, in particular, eliminate unnecessary radiation exposure and repeat hospital attendance for patients.

References

- Enns RA, Hookey L, Armstrong D, et al. Clinical Practice Guidelines for the Use of Video Capsule Endoscopy. *Gastroenterology* 2017; 152:497
- Jawaid, S. A., & Cave, D. R. (2021). Capsule Endoscopy. In T. H. Baron, & R. J. Law, *Handbook of Gastroenterologic Procedures - Fifth Edition* (pp. 179-188). Philadelphia: Wolters Kluwer.