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Introduction The authors have previously shown that experience improves lesion identification¹ in capsule endoscopy (CE) and that a nurse reader overcalled lesions but did not miss significant pathology.² Diagnostic nurse endoscopy is widely accepted in the UK but there is little data regarding proficiency in diagnostic capsule endoscopy (CE).

Methods Consecutive CE videos read and reported by the nurse were examined by the doctor and vice versa in a blinded fashion and differences were arbitrated by a panel of both participants and two additional experts. The nurse is an experienced conventional endoscopist who had preread over 200 CE procedures; the doctor had read over 2000 CE videos. Gut symptoms refer to abdominal discomfort $\pm$ altered bowel habit and symptoms 'plus' with 'alarm' features (clinical or other investigation). Findings were considered 'insignificant' if they did not contribute to diagnosis or management. Data was analysed using a paired t test.

Results Indications (95 patients, mean age 55 years, 35 male) included obscure bleeding (n=44), symptoms 'plus' (24), symptoms (12), coeliac disease (7), Crohn's disease (5) and other (3). The number of thumbnails did not differ (p=0.24) but the doctor read more quickly (17 vs 24 min, p<0.001). Of 262 landmarks recorded by both, 259 (99%) were identical (arbitrarily decided as within 10 frames). Diagnoses were made in 30 (32%) patients: both identified Crohn's disease (n=9); NSAID enteropathy (6); active bleeding (4); coeliac disease (2); tumour (2); angiodysplasia, anastomotic ulcer, biopsy site, pouchitis and infectious enteropathy (1 each). The nurse, but not the doctor, commented on altered blood in the stomach felt by the panel to be significant. The doctor diagnosed an ulcerated Meckel's diverticulum described by the nurse as an ulcerated stricture. A diverticulum was noted by the doctor but not the nurse in a patient presenting with anaemia who also had Crohn's disease. Of 35 management decisions, 27 (77%) were identical. Of the remaining decisions, both nurse (n=2) and doctor (n=2) failed to suggest what the panel considered appropriate actions. The nurse suggested repeating CE after aspirin cessation when deemed unnecessary by the panel and both nurse (n=3) and doctor (n=1) suggested one form of endoscopy when another was felt more appropriate.

Conclusion There was no difference in landmark recognition or diagnostic yield between an experienced nurse endoscopist and a doctor CE reader. Moreover, management advice was not demonstrably different and varied only in the advised use of different endoscopes to target areas of the small bowel, for which there is no evidence on which to base practice.

Competing interests None.

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BLINDED CONTROLLED TRIAL COMPARING IMAGE RECOGNITION, DIAGNOSTIC YIELD AND MANAGEMENT ADVICE BY DOCTOR AND NURSE CAPSULE ENDOSCOPISTS

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