

Comparison of three different Capsule Endoscopy Reading modes

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Background and study aims: Small-bowel capsule endoscopy (CE) is convenient but time-consuming for reading to endoscopist. Several reading modes have been introduced to reduce the reading time without lowering the detection rate, and there is no consensus on which one is superior. We compared three different reading modes (Quickview, Automatic single view, and Automatic quad view) in order to evaluate the mean reading time and the detection rate of small lesions. **Patients and Methods:** Thirty capsule endoscopy (CE) cases performed with Pillcam SB2 were reviewed retrospectively by using RAPID 5 Access software (Given Imaging Ltd., Yoqneam, Israel). Cases were previewed by experts, and then each was read by one of three trainee endoscopists. Considering positive lesions found by the experts as the golden standard, we investigated the lesions that were missed by trainee endoscopists and calculated the detection rate of each mode for different lesion. **Results:** Indications for CE included occult GI bleeding in sixteen cases (53.3%), anemia work up in two cases (6.7%), polyposis syndrome in two cases (6.7%), abdominal pain in five cases (16.6%), and others in five cases (16.6%). The reading time of Quickview was 2 minutes and 7 seconds, Automatic single view was 20 minutes and 4 seconds, and Automatic quad view was 20 minutes and 36 seconds. The overall detection rate was 34.15%, single 53.66%, and 46.34% for Quickview, Automatic single view, and Automatic quad view, respectively, without statistical significance. Quickview mode demonstrated relatively low detection rates for focal lesions such as ulcer, erosion, and hemorrhagic spots, while there was a 100% detection rate for GI bleeding. **Conclusion:** In this study, Quickview mode showed the shortest reading time, but there was no significant difference between the detection rate of three different modes. In active GI bleeding, Quickview mode showed significantly shorter reading time and high detection rate, and we suggest in such cases Quickview mode can be used as an additional method.

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