



ENDO-AID CAdE – Study

Usefulness of a novel computer-aided detection system for colorectal neoplasia: A randomized controlled trial

Study

This randomized controlled trial included 370 consecutive patients who were randomized 1:1 to CAdE (n=185) versus standard exploration (n=185) from November 2021 to January 2022. The primary endpoint was the ADR. Advanced adenoma was defined as $\geq 10\text{mm}$, harboring high grade dysplasia or with villous pattern. Otherwise, the adenoma was non-advanced. ADR was assessed in both groups stratified by endoscopist ADR and colon cleansing.¹

Results

In the intention-to-treat analysis the ADR was 55.1% (n=102/185) in the CAdE group and 43.8% (n=81/185) in the control group (P=0.029). Nonadvanced ADRs (54.8% vs. 40.8%, P=0.01) and flat ADRs (39.4 vs. 24.8, P=0.006), polyp detection rate (67.1% vs. 51%; P=0.004) and number of adenomas per colonoscopy were significantly higher in the CAdE group than in the control group (median [Percentile 25th-75th]: 1 [0-2] vs. 0 [0-1.5], respectively; p= 0.014). No significant differences were found in serrated adenoma detection rate. After stratification by endoscopist and bowel cleansing, no statistically significant differences in ADR were found.¹

PDR



31.6% increase through ENDO-AID CAdE*

Non-advanced ADR



34.3% increase through ENDO-AID CAdE**

Flat ADR



58.9% increase through ENDO-AID CAdE***

¹ Gimeno-García, A.Z., Negrin, D.H., Hernández, A., et al. *Usefulness of a Novel Computer-Aided Detection System for Colorectal Neoplasia: A Randomized Controlled Trial*. *Gastrointestinal Endoscopy*, October 8, 2022; doi: <https://doi.org/10.1016/j.gie.2022.09.023>.

* p-value of 0.004, relative percentage change, ** p-value of 0.01, relative percentage change, *** p-value of 0.006, relative percentage change.