



ENDO-AID CADe – Study

**Artificial intelligence (AI) colonoscopy in affecting the rate of polyp detection in colonoscopy:
A single centre retrospective study**

Study

A single center retrospective study was performed at Tin Shui Wai Hospital. PDR in CLN from 11/2020 to 03/2021 after the application of ENDO-AID (AI group) was compared to the cases from 12/2019 to 11/2020 before the application of the practice (non-AI group). Procedures were performed by a single endoscopist with experience in performing >3,000 CLN. Variables, such as patients' demographic data, indications, incidence of PDR, Boston Bowel Preparation Scale BBPS, withdrawal time, post CLN complication rate between the 2 groups, were compared. ¹

Results

Total 234 patients were recruited. 115 patients (49.1%) were in the non-AI group while 119 patients (50.9%) were in the AI group. The mean age of the non-AI was higher than the AI group (65.3 vs 59.2, $p < 0.001^*$), otherwise, there was no significant difference in sex ($p = 0.05$), percentage of smokers (20.8% vs 27.7%, $p = 0.22$), past medical history of IBD (0 vs 0, $p = 1.0$), family history of colorectal cancer (9 vs 9, $p = 0.94$), indications for CLN (e.g. follow up CLN for polyp/ cancer, per-rectal bleeding, altered bowel habit etc. $p > 0.05$), BBPS (7.88 vs 8.04, $p = 0.217$), withdrawal time (7.65 min vs 7.48 min, $p = 0.935$), completion rate (95.6% vs 98.3%, $p = 0.27$) and complication rate (0% in both groups, $p = 1.0$) between groups. ¹

In the contrary, PDR was significantly higher in the AI group than the non-AI group (64.7% vs 46.0%, $p = 0.003^*$). Besides, adenoma detection rate was also found significantly higher in the AI group than the non-AI group (52.9% vs 37.4%, $p = 0.017^*$). ¹

¹ Wong YT, Tai TF, Wong KF, et al. The study on artificial intelligence (AI) colonoscopy in affecting the rate of polyp detection in colonoscopy: A single centre retrospective study. Surg Pract. 2022;1-5. doi:10.1111/1744- 1633.12559.

*p-value of 0.003, relative percentage change, **p-value of 0.017, relative percentage change.

PDR



**40.6% increase
through ENDO-AID
CADe***

ADR



**41.4% increase
through ENDO-AID
CADe****

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