

AI Essentials: Lower GI

Louis Lau

Podcast Episode

Endoscopy

July 10, 2024

This episode discusses the current evidence and future potential of artificial intelligence in lower gastrointestinal endoscopy, focusing on polyp detection, diagnosis, and quality measures in colonoscopy.

KEY POINTS

- Over 20 randomised trials since 2019 show AI improves adenoma detection rate, proximal adenoma detection, and adenomas per colonoscopy across different endoscopist experience levels, though large polyp and sessile serrated lesion detection remain unproven and long-term data on post-colonoscopy colorectal cancer are needed.
- The guest argues AI acts as a co-pilot that standardises colonoscopy quality and reduces human fatigue, with one-off system costs potentially offset by routine use, though real-world pragmatic trials show more variable results than randomised trials due to factors like alarm fatigue and endoscopists turning systems off.
- Computer-aided diagnosis for polyp characterisation lags behind detection, with no randomised trials yet and current systems unable to differentiate sessile serrated lesions or T1 cancers; the speakers believe combined detection-diagnosis systems and diagnose-and-leave strategies for rectosigmoid hyperplastic polyps will be important next steps, though liability concerns remain unresolved.
- Human-AI interaction is critical because endoscopists do not always follow correct AI advice, influenced by trust, explainability, and possibly generational differences in technology adoption; the speakers suggest AI will also standardise bowel preparation grading, withdrawal time, and mucosal exposure measurement, and may reduce administrative burden through natural language processing.
- This discussion will interest gastroenterologists and endoscopists evaluating AI adoption in colonoscopy practice and quality improvement programmes.

VIEW THIS CONTENT ON GUTFLIX

<https://gutflix.eu/search/d/8a61d66e-baf0-11ef-beeb-0242ac140004>



AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.