

# Enhanced-image endoscopy more effective than conventional imaging for detecting upper GI cancers

October 20 2020

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Linked color imaging (LCI), a new image-enhanced endoscopy technique that allows users to recognize slight differences in mucosal color, is more effective than conventional white light imaging (WLI) for detecting tumors in the upper gastrointestinal tract. Findings from a randomized controlled trial are published in *Annals of Internal Medicine*.

The primary goal of upper GI endoscopic examination is to detect neoplastic lesions in the pharynx, esophagus, and stomach. However, early-stage lesions may be overlooked by conventional white light [endoscopy](#).

Researchers from National Hospital Organization Hakodate National Hospital, Hakodate, Hokkaido, Japan identified 1,502 patients with known previous or current cancer of the GI tract to compare the performance of LCI with WLI in detecting neoplastic lesions in the upper GI tract. The patients were randomly assigned to WLI followed by LCI examination (WLI group) or LCI followed by WLI examination (LCI group), with the patients just about evenly divided into each group. The researchers found that the doctors using LCI diagnosed 1.67 more neoplastic lesions in the first examination than they did with WLI. The proportion of [patients](#) with overlooked neoplasms was also lower in the LCI group than in the WLI group.

The authors conclude that LCI is more effective than WLI for detecting

neoplastic lesions in the pharynx, esophagus, and stomach. Their results suggest that many neoplastic lesions are being overlooked by conventional white light endoscopy performed in routine clinical practice. They say to reduce the rate of overlooking neoplasms, LCI should ideally be applied in clinical practice.

**More information:** *Annals of Internal Medicine* (2020).  
<https://www.acpjournals.org/doi/10.7326/M19-2561>

Provided by American College of Physicians

Citation: Enhanced-image endoscopy more effective than conventional imaging for detecting upper GI cancers (2020, October 20) retrieved 26 April 2024 from  
<https://medicalxpress.com/news/2020-10-enhanced-image-endoscopy-effective-conventional-imaging.html>

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