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**Manuscript Type:** REVIEW

**Optical imaging technology in colonoscopy: Is there a role for photometric stereo?**

Shandro BM *et al.* PS imaging in colonoscopy

Benjamin M Shandro, Khemraj Emrith, Gregory Slabaugh, Andrew Poullis, Melvyn L Smith

### Abstract

Colonoscopy screening for the detection and removal of colonic adenomas is central to efforts to reduce the morbidity and mortality of colorectal cancer. However, up to a third of adenomas may be missed at colonoscopy, and the majority of post-colonoscopy colorectal cancers are thought to arise from these. Adenomas have three-dimensional surface topographic features that differentiate them from adjacent normal mucosa. However, these topographic features are not enhanced by white light colonoscopy, and the endoscopist

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