

Table 1 OC-092 Diagnostic accuracy for adenomas

	SD	HD	p value
WLI	72% (65–78)	76% (70–81)	0.51
FICE	80% (74–84)	93% (88–96)	0.02
IC	93% (88–96)	94% (89–97)	0.95

to calculate the accuracy, sensitivity and specificity of in vivo assessment using either SD or HD scopes. McNemar's test was used for the statistical comparison of modalities of imaging.

Results 232 polyps <10 mm were examined, 89 polyps with standard definition endoscopes and 143 polyps high definition endoscopes. The true histology consisted of 155 neoplastic and 77 hyperplastic polyps. HD endoscopes significantly improved the ability of the endoscopist to make an in vivo diagnosis using FICE but had no effect on the WLI or IC predicted diagnosis. See table 1.

Conclusion In-vivo diagnosis of small polyps is very important for the correct management of patients. We can conclude from our work that:

- 1) In-vivo prediction of polyp histology is poor with WLI and this does not improve with HD scopes.
- 2) In-vivo prediction of polyp histology is good with FICE and improves significantly with HD scopes.
- 3) In-vivo prediction of polyp histology with IC is very good and is unaffected by HD scopes.

Competing interests None.

Keywords bowel cancer screening, chromoendoscopy, fice, indigo carmine, in-vivo diagnosis.

OC-092

THE EFFECT OF HIGH RESOLUTION ENDOSCOPY IN THE IN VIVO DIAGNOSIS OF COLONIC POLYPS

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Introduction In recent years the resolution of endoscopes has been increasing. Modern Fujinon colonoscopes have a CCD pixel density of 850 000 pixels compared to a standard definition 410 000 pixel CCD. However, acquiring high definition (HD) scopes represents a significant capital investment and their clinical value remains uncertain. This study aims to investigate the impact of high resolution endoscopy on the in-vivo histology prediction of colonic polyps

Methods Procedures were performed using Fujinon colonoscopes and EPX 4400 processor. Fujinon standard definition (SD) EC 530 and high resolution (HD) EC530 and EC 590 colonoscopes were used. Polyps <10 mm were assessed using white light (WLI), FICE and indigo carmine (IC) spray, with the predicted diagnosis recorded with each modality of imaging. In each case the kind of colonoscope (SD or HD) was recorded. Polyps were removed and sent for histological analysis, with the pathologist blinded to the diagnosis made by the endoscopist. The predicted diagnosis for WLI FICE and IC were compared to the true histology