#91 - COMPARISON OF LINKED COLOR IMAGING (LCI) AND WHITE LIGHT (WL) FOR ADENOMA DETECTION RATE IN COLONOSCOPY: A PROSPECTIVE STUDY

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Introduction: LCI is a technique that improves visualization during colonoscopy. It has been reported to increase the adenoma detection rate (ADR), which is important for preventing interval cancer and advanced colorectal carcinoma. LCI is expected to help with early detection of CRC.

Objectives: To investigate whether LCI can improve ADR compared to white light (WL).

Methods: A study compared LCI and WL colonoscopies to see which was more effective in detecting adenomas and polyps. Adenoma detection rate and polyp detection rate were calculated for each procedure, as well as the range of sessile serrated adenoma/polyps. The colon was divided into distal and proximal sections.

Results: 146 procedures were analyzed, 52.1% (n=76) used a WL and 47.9% (n=70) used LCI. ADR was higher in LCI (40%) compared to WL (50%), without significant differences (p=0.52). ADR was similar between WL and LCI, where 50% and 48.6% (p=0.8) were found. PDR was higher in LCI (70%) compared to WL (45%), without significant differences (p=0.10). PDR was significantly improved with the use of LCI, 71.4%, compared to WL, with 53.9% (p=0.02). Serrated detection rate: 11 sessile serrated adenomas in WL procedures were found, and 15 in LCI for an SSA/Ps of 12% and 16.3%. No differences in polyp location were found, with 64.9% of polyps detected with WL and 68.75% with LCI in the proximal colon.

Conclusion: 146 procedures were compared for colonoscopies using WL and LCI. ADR was similar between the two methods, but LCI improved PDR and slightly increased SSA detection. Polyp location was not affected. LCI may enhance polyp detection, but real-world research is needed.