Diagnostic performance of Computed Tomographic colonography with limited cathartic preparation in detection of colorectal polyps; Comparison with conventional colonoscopy

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Purpose: To prospectively evaluate the diagnostic performance of Computed Tomographic Colonography with limited bowel preparation for the depiction of colorectal polyps, by using conventional colonoscopy as the goldstandard technique.

Material and Methods: Study included forty five consecutively registered patients referred for conventional colonoscopy for colorectal cancer screening or for evaluation of colorectal symptoms; they were scheduled to undergo MDCT examination on the same day at Radiology Department in our institution, before the conventional colonoscopy examination. All patients underwent limited preparation.

Main outcome measures: Sensitivity, specificity, positive and negative predictive value of CTC versus CC in each group and overall.

Results: A total of 60 polypoid lesions were detected with colonoscopy in 45 patients over all sensitivity of CTC in polyp detection was 85.71%, specificity 71.24, PPV 96.77 and NPV 33.33, as regarding CTC performance in each group.

Conclusion: This study proved that CTC with limited cathartic bowel preparation and iodinated agents for faecal tagging can obtain high sensitivity and PPV values results for <5 mm polyps comparable to those obtained with conventional preparation with laxatives. Furthermore, this method could really improve the acceptance of CTC for colorectal cancer screening.