

## #92 - WATER EXCHANGE TECHNIQUE AS AN INSERTION METHOD IN ROUTINE COLONOSCOPY IN A NON-ACADEMIC CENTER A PROSPECTIVE OBSERVATIONAL STUDY

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Introduction: Water exchange during colonoscopy has been shown to improve cecal intubation rates, reduce pain, and increase visibility for improved detection of polyps and adenomas.

**Objectives:** To assess the effectiveness of the water exchange insertion technique for improving the cecal intubation rate, adenoma detection rate (ADR), and bowel clearance during colonoscopies.

**Methods:** A prospective observational study was performed on 658 consecutive patients who underwent colonoscopy between January 2022 and December 2022 in a non-academic outpatient gastroenterology center in the Dominican Republic. Parameters evaluated included cecal and ileum intubation rate, polyp detection rate, adenoma detection rate, adenomas per colonoscopy, adenomas per positive participant, bowel clearance rate, insertion and removal times, patient repositioning rate, and complications.

Results: 658 procedures were performed, of which 51.1% (337 patients) were female patients and had a mean age of 56.6 years. The ileal and cecal intubation rate was 99.7% (656 patients). The mean insertion time was 4 minutes and 45 seconds, with a mean water consumption of 364.4 ml. The mean withdrawal time was 13 minutes, with a mean water consumption of 308 ml. The polyp detection rate was 56.3% (143/253). The adenoma detection rate was 40.3% (102/253), while adenomas by colonoscopy were 1.1 (279/253). The rate of bowel clearance, according to the Boston Scale, was higher than 6 in 99.4% (653 patients), of which 93% (612 patients) achieved a total score of 9, 6.2% (41 patients) scored between 6 and 8. In this study, there were no complications related to the insertion method during colonoscopy. At the same time, the patient's position was not changed during the procedures (100%).

Conclusions: Water exchange during colonoscopy is a safe and effective method with high rates of cecal intubation and low complications. It also has higher polyp and adenoma detection rates compared to the standard method.

