Efficacy of Hood-cap Assisted Colonoscopy: Comparison with Regular Colonoscopy

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Background/Aim: A hood-cap attached to the tip of the colonoscope has been reported to improving cecal intubation rate and cecal intubation time. Also it has been reported to be helpful removing colon polyp. We investigated the efficacy of hood-cap associated colonoscopy for polyp detection rate and the cecal intubation time.

Method: Patients for screening colonoscopy in Busan St. Mary’s medical center were enrolled to this randomized controlled trial between July 2010 and September 2010, and assigned to a hood-cap assisted colonoscopy (CAC) or a regular colonoscopy (RC). The evaluated outcomes were polyp detection rate, overall cecal intubation time and cecal intubation time in difficult cases (history of previous abdominal or pelvic surgery, obesity, old age).

Result: A total of 260 patients enrolled in this study were randomly allocated to the CAC group (N=130), or RC group (N=130). The overall cecal intubation time was shorter in the CAC group than in the RC group (7.8±5.1 min vs. 5.7±3.4 min, p<0.001). The polyp detection rate was higher in the CAC group than in the RC group (56.7% vs. 44.4%, p=0.002). The cecal intubation time in expert group and non-expert group were shorter in the CAC group than in the RC group (expert; 5.5±2.0 min vs. 4.1±2.2 min p=0.001, non-expert; 9.4±5.9 vs. 6.7±3.7 p=0.01). The cecal intubation time in obese patients (BMI ≥25) was shorter in the CAC group than in the RC group (9.4±4.2 vs. 6.7±3.7 p=0.01). The cecal intubation time in other difficult cases (history of previous abdominal or pelvic surgery, old age) was shorter in the CAC group, but not significant statistically.

Conclusion: Use of a hood-cap assisted colonoscopy improved the detection rate of colon polyp and shortened cecal intubation time.

Key Words: Polyp detection rate, Cecal intubation time