COLON CAPSULE ENDOSCOPY COMPARED TO COLONOSCOPY FOR COLORECTAL NEOPLASMS DIAGNOSIS: AN INITIAL EXPERIENCE AND A BRIEF REVIEW OF THE LITERATURE

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COLON CAPSULE ENDOSCOPY COMPARED TO COLONOSCOPY FOR COLORECTAL NEOPLASMS DIAGNOSIS: AN INITIAL EXPERIENCE AND A BRIEF REVIEW OF THE LITERATURE (Abstract): Conventional colonoscopy is regarded as the gold standard procedure for the diagnosis of colorectal neoplasms despite its several limitations including invasiveness, discomfort and potential complications. Colon capsule endoscopy (CCE) could be an attractive alternative method to the invasive colonoscopy for the diagnosis of colorectal cancer and polyps. Publications regarding the use of CCE for detecting colorectal cancer and polyps, as well as our experience, were reviewed. The new second-generation CCE (PillCam COLON 2) has improved accuracy compared with the first-generation system for detecting colorectal neoplasms.

Key words: COLON CAPSULE ENDOSCOPY, COLONOSCOPY, COLORECTAL POLYPS.

Colorectal cancer (CRC) is a leading cause of morbidity and mortality worldwide. Approximately 90% of CRC develop from benign adenomatous polyps, and current guidelines recommend screening colonoscopy with subsequent polypectomy to prevent progression into cancer (1). With such screening program in the United States, a decrease in incidence and mortality of CRC was reported (2, 3). However, colonoscopy has several limitations including invasiveness, discomfort, embarrassment, high cost, sedation, and potential complications. Therefore, many patients are reluctant to undergo this procedure, and generally, participation in colonoscopy screening is unacceptable low (4).

Colon capsule endoscopy (CCE) is a new, safe non-invasive and patient-friendly procedure for visualizing the colon with no need of sedation, intubation, air insufflation or radiation; this new technology might become an alternative method to the invasive conventional colonoscopy in CCR screening and polyp detection.

In this paper we aim to present our personal experience with CCE, to summarize the recent impressive technical achievements, and to review the most recent studies addressed to this subject.

COLON CAPSULE ENDOSCOPY: DEVICE DESCRIPTION

The PillCam Colon capsule 1 (PCC1)