

# ผลการตรวจคัดกรองมะเร็งลำไส้ใหญ่โดยวิธีส่องกล้อง ในโรงพยาบาลเกษตรวิสัย

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## Results of Screening Colonoscopy in Kasetwisai Hospital

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**หลักการและวัตถุประสงค์:** มะเร็งลำไส้ใหญ่ เป็นมะเร็งที่พบมากที่สุดในระบบทางเดินอาหาร พบมากเป็นอันดับสามของมะเร็งในเพศชายและอันดับสี่ของมะเร็งในเพศหญิง ถ้ารวมประชากรทั้งหมดเป็นมะเร็งที่พบมากเป็นอันดับห้า โดยส่วนใหญ่จะมาเมื่อมีอาการแล้วซึ่งบางครั้งสายเกินไป ดังนั้น ในการที่จะวินิจฉัยได้เร็วหรือตั้งแต่เป็นตั้งเนื้ออยู่ จะสามารถลดอัตราการตายและอุบัติการณ์การเกิดมะเร็งลำไส้ใหญ่ได้อย่างชัดเจนวิธีที่ดีที่สุดคือเลือกบุคคลที่มีความเสี่ยงมาทำการตรวจคัดกรองโดยการส่องกล้องลำไส้ใหญ่เพื่อให้พบมะเร็งระยะเริ่มต้น

**วิธีการศึกษา:** ประชาชนที่มีความเสี่ยงคือ อายุ 50-70 ปี ถูกสุ่มคัดเลือกให้มาทำ FIT-test พบคนที่ผล FIT- test เป็นบวกและไม่มีข้อห้ามในการส่องกล้องลำไส้ใหญ่จำนวน 822 ราย ได้รับการตรวจคัดกรองมะเร็งลำไส้ใหญ่โดยวิธีส่องกล้องลำไส้ใหญ่ในโรงพยาบาลเกษตรวิสัย ตั้งแต่เดือนธันวาคม พ.ศ. 2560 – มกราคม พ.ศ.2562

**ผลการศึกษา:** ตรวจพบมะเร็งลำไส้ใหญ่ระยะที่สอง 11 ราย (ร้อยละ 2.09) ซึ่งได้รับการรักษาและผ่าตัดตามแนวทางมาตรฐาน พบ Adenomatous polyp และ Tubulovillous adenoma 169 ราย (ร้อยละ 21.16) ทั้งหมดได้รับการทำ Polypectomy ในขณะที่ส่องกล้องพบ ในจำนวน 169 ราย พบ Polyp ที่มีขนาดมากกว่าหรือเท่ากับ 1 เซนติเมตร(มีความเสี่ยงปานกลางถึงสูงที่จะกลายเป็นมะเร็งลำไส้) จำนวน 45 ราย (ร้อยละ 4.43) พบ Diverticulums 61 ราย (ร้อยละ 8.06) Colitis/Proctitis 30 ราย (ร้อยละ4.42) พบพยาธิในลำไส้ 12 ราย (ร้อยละ1.16) และ ริดสีดวงทวารหนัก 3 ราย (ร้อยละ0.7) มีภาวะแทรกซ้อนใหญ่คือลำไส้ใหญ่ทะลุ 2 ราย (ร้อยละ0.24) ซึ่งได้รับการแก้ไขทันที

**สรุป:** ขณะนี้เป็นที่ยอมรับว่าส่วนใหญ่แล้วมะเร็งลำไส้ใหญ่เปลี่ยนแปลงมาจาก Adenomatous polyp ซึ่งเรียกเหตุการณ์นี้ว่า adenoma – carcinoma sequence ถ้าขนาดเพิ่มขึ้นโอกาสเปลี่ยนแปลงไปเป็นมะเร็งลำไส้ใหญ่จะสูงขึ้นโดยเพิ่มขึ้นร้อยละ 35-50 ใน polyp ที่มีขนาดมากกว่า 2 เซนติเมตร ดังนั้นจากการตรวจคัดกรองมะเร็งลำไส้ใหญ่ในการศึกษานี้สามารถขจัดโอกาสการเปลี่ยนแปลงไปเป็นมะเร็งลำไส้ใหญ่ของ

**Background and Objective:** Colorectal carcinoma is the most common malignancy of the gastrointestinal tract. It is the third common cancer in men, the fourth common cancer in women, and the fifth common cancer for both sex in the world. When patients come to the hospital with gastrointestinal symptoms ,frequently it is too late. Early detection along with improvements in medical and surgical care are thought to be responsible for the decreasing mortality of colorectal cancer observed in recent year. The best way to find early cancer of colon , potential people were selected for screening colonoscopy.

**Materials and Methods:** The potential people(50-70 years old and positive Fit-test)and no contraindication for colonoscopy 822 cases were selected and performed screening colonoscopy from December 2017 – January 2019 in Kasetwisai Hospital.

**Results:** There were well differentiated adenocarcinoma in 11 cases ( 2.09 %) and all were stage II by TNM Staging whom received medical and surgical care. Adenomatous polyp and tubulovillous adenoma were found in 169 cases ( 21.16 % ) were diagnosed and performed polypectomy.In this group there were intermediate and high risk polyps (large polyp/tubulovillous adenoma) 45 cases (4.43% ). Others were diverticulums 61 cases (8.06%) ,colitis/proctitis 30 cases (4.42%) , parasitic infestation 12 cases (1.16%) and hemorrhoids 3 cases (0.7%) . The complication was colonic perforation in 2 cases (0.24%).

**Conclusion:** It is now well accepted that the majority of colorectal carcinoma was evolved from adenomatous polyp; the sequence of events is

Neoplastic polyps ถึง 169 ราย (ร้อยละ 21.16 ของประชากรที่มีความเสี่ยง 822 ราย)

**คำสำคัญ:** คัดกรองมะเร็งลำไส้ใหญ่

adenoma – carcinoma sequence. The incidence of invasive carcinomas increase with size (35-50% in polyp larger than 2 cm). This study could eliminated colorectal cancer strategies by targeting the neoplastic polyps for removal before malignancy develops in 169 cases (21.16 % of all the potential people 822 cases).

**Key word:** Screening Colonoscopy

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### Introduction

Colorectal carcinoma is the most common malignancy of the gastrointestinal tract. It is the third common cancer in men, the fourth common cancer in women, and the fifth common cancer for both sex in the world<sup>1</sup> and in Thailand. In Kasetwisai hospital when patients come to the hospital with gastrointestinal symptoms, frequently it is too late. Because the majority of colorectal cancers are thought to arise from adenomatous polyps, preventive measure focus upon identification and removal of all these premalignant lesions. In addition, many cancers are asymptomatic and screening may detect these tumors at an early and curable stage. Colonoscopy is currently the most accurate and most complete method for examining the large bowel. This procedure is highly sensitive for detecting even small polyps (< 1 cm) and allows biopsy, polypectomy, and control hemorrhage<sup>3</sup>. The best way to find early cancers of colon and premalignant lesions is screening colonoscopy<sup>6</sup>.

### Materials and methods

Aging is the dominant risk factor for colorectal cancer, with incidence rising steadily after age 50 year. So, the people age between 50-70 years old were selected for fecal immunochemical test (FIT) then colonoscopy examination were done to evaluate patients with positive FIT. The potential people (50-70 years old and positive FIT) and no contraindication for colonoscopy were performed screening colonoscopy from December 2017 – January 2019 in Kasetwisai hospital. The findings were recorded.

### Results

There were 822 potential people (50-70 years old and positive FIT); 458 males (51.98%) and 364 females (48.02%). The mean ages of patients were

59.67(+/- 6.71)year. The most common pathological findings were adenomatous polyps and tubulovillous adenomas in 169 cases (21.16%) and all of them were performed polypectomy during colonoscopy. The results of classified adenomatous polyps and tubulovillous adenomas by size of polyps in 169 cases were <1 cm in 124 cases (73.37%), 1-2 cm in 23 cases (13.61%), and more than 2 cm in 22 cases (13.02%). (Figure 1 and Figure 2)

There were well differentiated adenocarcinoma in 11 cases (2.09%); with asymptomatic in 9 cases and mucous bloody stool in 2 cases. They were classified in stage II of Tumor, Lymph Node and Metastasis classification of malignant tumors (TNM staging) by the American Joint Committee on Cancer (AJCC) whom received standard medical and surgical care after pathology found.

Other findings were diverticulums in 61 cases (8.06%), colitis/proctitis 30 cases (4.42%), parasitic infestation in 12 cases (1.16%), and hemorrhoids in 3 cases (0.7%). (Figure 1)

There were 2 cases (0.24%) of colonic perforation that the surgeon could detect immediately during the procedure and successful colonic repaired after that.

### Discussion

Because aging is the dominant risk factor for colorectal cancer, with incidence rising steadily after age 50 year. More than 90% of cases diagnosed are in people older than age 50 years. This is the rationale for initiating screening test of asymptomatic people at average risk of developing colorectal cancer at age 50 years<sup>3</sup>. For screening of FIT, in many studies concluded that FIT screening had 25% sensitivity and 77.36% specificity for colorectal cancer. For FOBT is missing up to 50% of cancers and majority of adenomas. Its specificity is low because 90% of patients with positive FOBT do not have colorectal

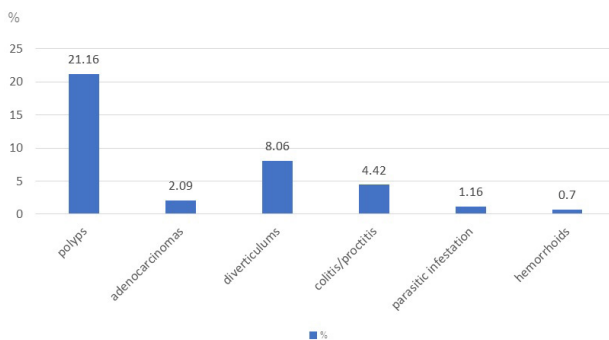


Figure 1 Findings of screening colonoscopy 822 cases in Kasetwisai Hospital

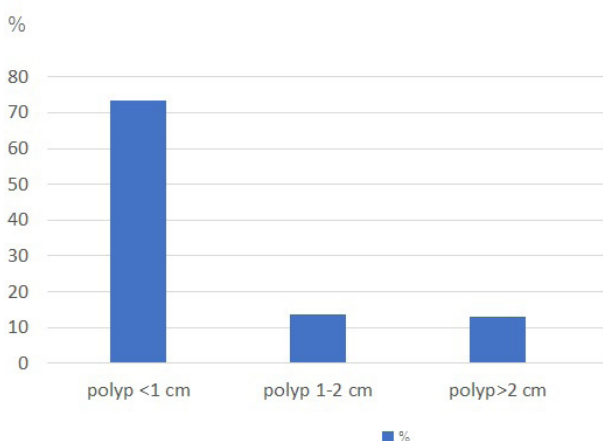


Figure 2 169 cases of polyps classified by size

cancer<sup>3,4</sup>. However, FIT is so strong efficacy if done at average-risk older than 50 years of age<sup>5</sup>. So, the people age between 50-70 years old were selected for FIT. The potential people ( 50-70 years old and positive FIT ) who did not have contraindication were included, then colonoscopy examination were done to evaluated patients.

In this study, there were premalignant polyps in 169 ( 21.16%) of 822 potential people eliminated by removal before malignancy develops. Adenomatous polyps are common, occurring in up to 25% of the population older than 50 years of age<sup>3</sup>. It is now well accepted that the majority of colorectal carcinoma evolve from adenomatous polyp; this sequence of events is adenoma – carcinoma sequence. Invasive carcinomas are rare in polyp smaller than 1 cm and incidence increase with size ( 35-50% in polyp larger than 2 cm )<sup>3</sup>. These results, there were intermediate (1-2 cm) and high risk (> 2 cm) polyps in 45 cases (4.43% ) eliminated.

There were well differentiated adenocarcinoma in 11 cases ( 2.09 % ) ; with asymptomatic 9 cases and mucous bloody stool 2 cases. They were classified in stage II of TNM Staging whom received standard medical and surgical care after pathology

found. Majority of colorectal cancers are thought to arise from adenomatous polyps, preventive measure were focus upon identification and removal of all these premalignant lesions. In addition , many cancers are asymptomatic and screening may detect these tumors at an early and curable stage. Early detection along with improvements in medical and surgical care are thought to be responsible for the decreasing mortality of colorectal cancer observed in recent year<sup>3</sup>.

Other findings such as diverticulums, colitis/ proctitis , parasitic infestation ,and hemorrhoids could cause positive FIT. All of them were treated and given consultations.

There were 2 cases (0.24%) of colonic perforation that the surgeon could detect immediately during the procedure and successful colonic repaired after that. Colonoscopy is currently the most accurate and most complete method for examining the large bowel. This procedure is highly sensitive for detecting even small polyps and allows biopsy , polypectomy, control hemorrhage, and dilatation of strictures. However, colonoscopy does require mechanical bowel preparation and the discomfort during the procedure requires conscious sedation in most patients. Colonoscopy is more expensive than other screening test and requires well-trained endoscopist. The risk of major complication after colonoscopy (perforation and hemorrhage) is very low (0.2–0.3%)<sup>2,3</sup>.

### Conclusion

It is now well accepted that the majority of colorectal carcinoma evolve from adenomatous polyp; this sequence of events is adenoma – carcinoma sequence . So this study could eliminated colorectal cancer strategies by targeting the neoplastic polyps for removal before malignancy develops in 169 cases (21.16 % of all the potential people 822 cases). In this group there were intermediate and high risk polyps 45 cases (4.43%)

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