中文題目:用大便 FOBT 檢驗來早期偵測大腸癌兩病例報告:發現第一期大腸癌 英文題目: Early Detection of Colon Cancer Using Stool FOBT Two Case Reports of Stage 1 Colon Cancer 作 者:韓明榮 謝明裕 翁明義 許春暉 服務單位:高雄市 明榮診所

Introduction

The stool Fecal Occult Blood Test (FOBT) uses immunochemical methods to screen for colon cancer (Figure 1). This new method is a more sensitive test for early detection of colon cancer than the routine stool Guaiac smear test.

According to the 2020 statistics from the Ministry of Health and Welfare, colon cancer is the most common cancer for both men and women in Taiwan (Figure 2). Furthermore, in terms of survival rate, the earlier detection, the better result. For example, the 5-year survival rate for stage 1 colon cancer is around 95%, while it is down to around 5% for stage 4. We would like to share our experiences of using stool FOBT for colon cancer screening and detecting two cases of stage 1 colon cancer in the recent three years at our clinic.



Figure 1. Stool FOBT test



Figure 2: Colon cancer: finding of colonoscopy

Materials and Methods

In our clinic, from January 2018 to August 2020, a total of 244 cases received stool FOBT.

Based on the colon cancer screening program guidelines by the Ministry of Health and Welfare, our first group of patient enrollment includes Taiwan residents, ages 50 to 74, can receive one stool FOBT test every two years. Another group of patient enrollment is those clinically suspected of colon lesions. Once the stool FOBT test is positive, the case will be referred to a medical center for colonoscopy.

Results

Among the 244 cases, 21 (8.6%) stool FOBT were positive. Among the 21 positive cases, four (19%) cases of colon cancer, seven (33%) cases of polyp, four (19%) normal cases were found, while six (29%) cases did not complete the referral process.

Among the four cases of colon cancer, two cases were diagnosed as stage 1; one case was stage 2 and one case was stage 3.

Case 1

A 70-year-old woman received antihypertensive therapy regularly at our clinic. She had no abdominal symptoms and signs. On February 16, 2019, she received a stool FOBT according to the nationwide colon cancer screening program. The first and follow-up stool FOBT were both positive, FOBT titer >216 ng/ml.

She was referred to a medical center for a colonoscopy. A colon tumor was found at the cecum, sized 3-4cm; tissue biopsy revealed adenocarcinoma. Further evaluation was carried out and stage 1 colon cancer was diagnosed. Surgical removal was done without chemotherapy.

Case 2

An 81-year-old woman visited our clinic due to hypertension and chronic glomerulonephritis with stable condition. However, she sometimes complained of abdominal discomfort. On March 9, 2020, she received a stool FOBT. The first and follow-up stool FOBT tests were both positive, FOBT titer >400 ng/ml. She was referred to a medical center to rule out the colon lesion. Colonoscopy found there a 2.5cm ulcerative tumor at the splenic flexure; biopsy was done and a pathological analysis reported of adenocarcinoma. Further abdominal CT scan found no metastatic lesions, and colon cancer stage 1 was diagnosed. Laparoscopy-assisted left hemicolectomy was performed. No chemotherapy was given.

Discussion

With Taiwan's current colon cancer screening program, stool FOBT is a simple and very cost-effective early screening test for colorectal cancer. It is worthwhile promoting this program.

For Taiwan residents aged between 50 and 74, one stool FOBT test every two years is encouraged by the Ministry of Health and Welfare. However, for people below 50 or over 74 years old, if colon lesion is suspected clinically, stool FOBT can be recommended too.

Benjamin Franklin — "An ounce of prevention is worth a pound of cure." In addition to practicing a healthy lifestyle, such as taking regular exercise, reducing greasy food and increasing vegetable intake, the idea of receiving the stool FOBT is very helpful for the public to prevent and/or survive the terrible colon cancer.