

A COMPARISON BETWEEN TWO CONSECUTIVE COLORECTAL CANCER SCREENING ROUNDS IN AN ITALIAN NORTH-EASTERN DISTRICT: PRELIMINARY RESULTS

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BACKGROUND: Colorectal cancer (CRC) screening with fecal occult blood test (FOBT) is widely recommended because of its efficacy in reducing CRC mortality. Generally, in the second round, adhesion rate as well as cancer detection rate is lower than in the first round.

AIM: To compare first with second round results in a district with high adherence.

METHODS: All the inhabitants belonging to ULSS1-Veneto, from 50 to 69 years old, were invited by mail, to perform a 1-day FOBT based on latex agglutination without any dietary restriction. The specimens, collected by both Chemists and General Practitioners, were examined according to an automatic procedure. The positive subjects were invited to undergo colonoscopy. Polyps invading the submucosal layer were defined as malignant polyps, but also considered as CRCs. FOBT interval cancer was defined as CRC detected in FOBT+ve patients in the second round but negatives in the first one.

RESULTS: In the completed first round (from February 2005 to February 2007), 30,654 subjects (90% of the target population) were invited to perform FOBT. 71% of the enrolled people performed the test. 5.2 % of the subjects were FOBT positive. In the non completed second round (from March 2007 to December 2008), 25,827 subjects were invited to perform FOBT. 65.1% of the enrolled people performed the test ($p < 0.0001$). 3.9% of the subjects were FOBT positive ($p < 0.0001$). In the first round, 56 out of 976 (5.7%) FOBT+ve subjects, who performed colonoscopy, had a colorectal cancer. In the non-completed second round, 30 out of 649 (4.6%) FOBT+ve subjects, who performed colonoscopy, had a colorectal cancer. The detection rate for CRC was 2.6 X 1000 and 1.8 X 1000 in the first and second round respectively ($p < 0.001$). 23% (13 out of 56) and 26% (8 out of 30) of colorectal cancers were malignant polyps, in the first round and second round, respectively. CRCs with negative lymph nodes were detected in 68% and 83% in first and second round respectively. FOBT interval cancers were 27 out of 30 (90%)

CONCLUSION: A significant lower adherence as well as FOBT+ve rate and detection rate in the second than in first round was observed. The detection of malignant polyps, in comparison to symptomatic patients who perform colonoscopy, remains high in both rounds. High rate of FOBT interval cancer imposes a strict surveillance of the overall target population during the screening program.