



High adherence to screening colonoscopy in high risk population, first degree relatives of patients with colorectal cancer: 2010-2012 experience

Biscaglia G., Nardella M., Andriulli A.

BACKGROUND

About 20-30% of colorectal cancer presents a familial aggregation and first-degree relatives of patient with CRC are a high risk population. Colonoscopy is one of the methods of choice to screen high risk population, however many screening program lack in adherence.

OBJECTIVE

This experience aims to evaluate the rate of adherence to colonoscopy in first-degree relatives of patients with CRC and identify main associated factors in a region without a screening program.

PATIENTS and METHODS

From January 2010 to December 2012 devoted personnel (a medical doctor or a nurse) identified all subject with past or new diagnosis of CRC, inpatients or outpatients of a single gastroenterology center. Prior administration of an informed consent, all information (age, gender, contacts, studies, previous colonoscopy, etc) about all first-degree relatives were collected. A colonoscopy to be performed in analgesia or sedo-analgesia (meperidine and/or midazolam) within twelve weeks was offered to all subjects aged between 45 and 75 yo or aged 10 year before the age of diagnosis of CRC in 1st grade relative. Subjects belonging to family affected from known FAP, HNPCC and other genetic conditions or with severe comorbidities or symptomatic were excluded.

RESULTS

We identified 1454 first-degree relatives from 286 families. Eligible subjects were 695 (M:F=307:388, median age 57yo). Two hundred and twenty-nine subjects (32.9 %) were been undergone to colonoscopy in the previous 5 years. We offered colonoscopy to 466 subjects, 284 (60,9 %) accepted and 302 were performed (24 subjects accepted but delayed colonoscopy); only 182 subjects (30,1%) refused. No significative difference were found between subjects under and over 57 years, male and female, type of studies, age of the index case; a significative difference was found between people from the same administrative province and other province or regions ($p < 0.01$).

CONCLUSIONS

These results indicate that awareness of the importance of a screening test is present also in administrative regions without a screening program. Moreover, colonoscopy offered by devoted personnel, performed in analgesia or sedo-analgesia in a nearby center is well accepted in first-degree relatives of patients with colorectal cancer.



Fig. 1 Adherence to screening colonoscopy 2010-2012

Feature	p
Age (<57 vs >57)	0,13
Gender (M vs F)	0,35
Residence (Province vs Out)	0,046
Educational qualification	0,093
Age of index case (<61 vs >61)	0,78
Number of relatives affected (1 vs >1)	0,28
Voluntary screening vs Screening after call	< 0,001

Tab. 1 Main features evaluated