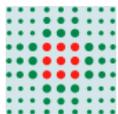

Colorectal cancer screening in Ferrara: Results in early (2005-2009) and late (2009-2013) screening periods and surgical treatment of the screenees.

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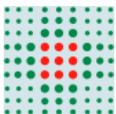
GISCoR
gruppo italiano screening coloretale

Aims

- To analyse the results of the screening program in Ferrara
- To compare the cohort of screenees undergoing CRC surgical treatment in the early (March 2005 - March 2009) and late (April 2009 - March 2013) screening periods

Patients and Methods

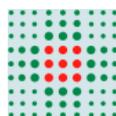
- All 50-69-years old residents in Ferrara were invited for i-FOBT; (+) screenees were offered a colonoscopy, i-FOBT (-) were invited to repeat the test > 2 years
- Colonoscopy (-) screenees were invited to repeat endoscopy >5 years; endoscopic follow-up was started if adenomatous polyps were found; necessary surgery was performed ≤30 days if CRC not amenable to endoscopic treatment was diagnosed



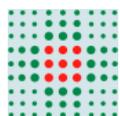
Results

	Early Screening (2005-2009)	Late Screening (2009-2013)
People invited for i-FOBT	76,767	86,763
Adherence to i-FOBT	36,930 (48%)	40,194 (46%)
i-FOBT (+)	2,004 (5%)	1,827 (5%)
Adherence to colonoscopy	1,688 (84%)	1,506 (82%)
Adenoma or cancer	853	731

	Early Screening (2005-2009) N = 853	Late Screening (2009-2013) N = 731
Low-risk adenomas	367 (43%)	351 (48%)
High-risk adenomas	360 (42%)	336 (46%)
Malignant adenomas (pT1)	59 (7%)	34 (5%)
Invasive cancers	67 (8%)	10 (1%)



Variables	Early Screening (2005-2009) N=230	Late Screening (2009-2013) N=110	p
Age (years)	64.0 (58.3-67.8)	64.1 (57.3-68.0)	<0.001
Gender			0.014
Men	149 (65%)	58 (53%)	
Women	81 (35%)	52 (47%)	
Tumor TNM stage			<0.001
0	54 (24%)	24 (22%)	
I	48 (21%)	38 (34%)	
II	51 (22%)	20(18%)	
III	74 (32%)	27 (25%)	
IV	3 (1%)	1 (1%)	
Tumor Site			0.505
Right colon	74 (32%)	35 (32%)	
Transverse colon	7 (3%)	5 (4%)	
Left colon-rectum	149 (65%)	70 (64%)	
Hospital LOS (days)	10 (9-13)	9 (7-11)	<0.001



Discussion

- The adherence to i-FOBT remained low throughout the screening periods (48% early period vs. 46% late period)
- Adherence rate for colonoscopy among i-FOBT (+) screenees ($\cong 85\%$) can be improved because of the possible risk of cancer missed.
- The screening program did not detect an increased proportion of proximal colorectal cancers, in contrast to other Authors
- As expected, decreased patients' age and earlier stage CRC diagnosis were achieved with the screening program
- Postoperative hospital length of stay following colorectal resection remained high (9 to 10 days) despite the young patients' age and the adoption of minimally invasive techniques.
- More recently implementation of ERAS (Enhanced Recovery After Surgery) programs at the S. Anna University Hospital in Ferrara allowed sensitive reduction in hospital stay [4 days (4-6)] and money saving (above €3,000.00 per patient) following colorectal resection for CRC.

