TITLE: **OBSERAVATIONS AND RESULTS OF THE FIRST ROUND OF COLORECTAL CANCER SCREENING PROGRAMME IN RIMINI**

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BACKROUND – AIM

Cancer of the large bowel (colorectal cancer) is the third most common form of cancer (after lung and prostate cancer) in males in Italy and the second form in females after the cancer of the breast. Colorectal cancer is registered as the underlying cause of approximately 20.000 deaths in Italy every year. In our Region, Emilia Romagna, the incidence of colon cancer is 2.5 times more frequent then rectal cancer and in 2003 we registered 1.606 deaths (1.147 for colon cancer and 458 for the rectal one) due to colorectal cancer (11.5% of all tumors).
In Rimini, instead, in 2005, we registered 223 tumors of the colon (129 males and 94 females) and 94 rectal cancer (61 males and 33 females).
In 2005 in Rimini, we started the first Round of the Colorectal Cancer Screening Programme; we invited from march 2005 to march 2007, 75.464 individuals aged 50-69, offering FOBT (Faecal Occult Blood Testing) every two years (biennal screening), and in case of positive test we offered pancolonscopy as second level test.
The aim of this study is the comparise of the histopathologic profile (TNM) of tumors diagnosis before the beginning of colorectal cancer screening programme (2003-2004) and those found in the first round of Screening.

MATERIALS AND METHODS: in this case-control study we considered "cases" all individuals with colorectal cancer consecutively diagnosed by Screening and "controls" the pre-screening diagnosed one. Cases and controlls were matched by sex and age with ratio1:2. We enrolled 110 cases and 202 controlls, aged 50-69 years, registered in Rimini's Hospital. The statistical analysis was performed with STATA 9.2 program.

RESULTS: Univariate analysis showed a significative difference between cases and controls (Pearson chi square test) for "T" - Tumor size in TNM definition - ($p< 0.001$) and Dukes stage ($p<0.001$). Instead we found a non significative difference for localization (colon vs rectum $p>0.01$): in cases colon cancer were about 3 times more frequent then rectum, in colntrols colon cancer were about 5 times more frequent then the rectum one.
In the multivariate analysis (logistic regression analysis) we found a significative association for "T" and localization.

CONCLUSIONS: We observed a significative difference in "T" and Dukes Stage between cases and controlls; this probably suggests that screening programme based on biennal FOBT, has an objective benefit in detecting tumors at early stage with obvious rebounds on the kind of surgery, chemotherapy and quality of life. We know that we need further studies and long follow up period to investigate differences in mortality and survival in the two groups.