

STUDY SHOWING THE NECESSITY OF A NATIONWIDE SCREENING PROGRAMME FOR COLORECTAL CANCER IN ROMANIA

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Keywords: colorectal cancer, screening, prevention

Abstract: Neoplasia is one of the main challenges, both for the medical researcher and clinician. With increasing life expectancy worldwide, the incidence of neoplasia has also increased. WHO warns about the possible increase by 70 percent of the incidence of cancer until 2034. Our study aimed at examining the feasibility of screening for colorectal cancer prevention. During 2011-2013, we conducted a screening on a group of 1058 patients, hospitalized in the most majority. The patients were admitted by the presence of suggestive colorectal symptoms or laboratory data. The battery of tests used was: CBC, ESR, CRP, transaminases, stool examination / hemocult test for detecting occult blood feces, total colonoscopy. We have identified 9.26 % cases of adenocarcinomas and 8.9 % high-grade dysplasia (carcinoma in situ). In 12 cases, we found large, advanced adenomas. A total of 260 subjects have been detected by the 358 total number of adenomatous polyps. Of the 358 adenomas, 18.9 % had low-grade dysplasia, 8.9 % were adenomas with severe dysplasia, of which almost 50% were adenocarcinomas with submucosal invasion. In conclusion, we consider as essential to start and sustain the long-term national programme for the early detection of colorectal cancer and the correct identification of the variables of the study (minimum age, insurance level in the non-cooperating patients for the increase of the compliance level etc.).

Cuvinte cheie: cancer colorectal, screening, prevenție

Rezumat: Neoplaziile reprezintă una dintre principalele provocări adresate atât cercetătorului din domeniul medical, cât și clinicianului. Odată cu creșterea speranței de viață la nivel mondial, a crescut și incidența neoplaziilor. Datele OMS avertizează asupra posibilei creșteri cu până la 70 de procente a incidenței cazurilor de neoplazii până în anul 2034. Studiul nostru a avut scopul de a analiza fezabilitatea unui screening pentru cancerul colorectal utilizând colonoscopia ca metodă de screening. În perioada 2011-2013, am efectuat un screening asupra unui lot de 1058 pacienți, în majoritate internați, care au prezentat o simptomatologie sau date paraclinice sugestive pentru patologia colonică. Bateria de teste utilizată a fost reprezentată de: ex. de laborator: HLG, VSH, PRC, transaminaze, examenul de scaun / testul hemocult pentru depistarea hemoragiilor oculte fecale, colonoscopia totală. Am identificat 98 cazuri de adenocarcinoame (9,26%) și 32 cazuri (8,9%) displazii de grad înalt (carcinom in situ). În 12 cazuri, s-a pus în evidență prezența unor adenoame avansate, de mari dimensiuni. S-a efectuat un număr important de polipectomii. La un număr de 260 de subiecți s-au depistat un număr total de 358 polipi adenomatoși. Din totalul de 358 de adenoame, 68 au prezentat grad mic de displazie (18,9%), 32 au fost adenoame cu displazie severă (8,9%), din care 12 adenocarcinoame cu invazie submucoasă. Concluzionând, considerăm esențială demararea și susținerea pe termen lung a programului național de depistare precoce a cancerului colorectal, precum și identificarea corectă a variabilelor de studiu (vârsta minimă, nivelul de asigurare la pacienții necooperanți pentru creșterea gradului de complianță etc).

INTRODUCTION

A nationwide colonoscopy screening programme that uses highly qualified endoscopists can detect a significant number of adenomas and early-stage carcinomas. We strongly suggest starting a nationwide programme for the early cancer diagnosis and prevention in Romania, funded by the National Health Insurance House.

The WHO predicts an increase by 70% of the cases of newly diagnosed cancer by the year 2034 (WHO, 2013). Currently, we are looking at approximately 14 million cases of newly diagnosed cancer worldwide, this number being expected to raise to 25 million within the next two decades (WHO, 2013). Under these auspices and considering the definitive cure from cancer as being not plausible in most cases, the WHO advises to

focus on cancer prevention. Given the high costs of modern cancer therapies, cancer therapy has a tremendous impact on healthcare costs, especially in industrialized countries.

In regard to the actual pathology, neoplasias of the digestive tract are leading the statistics and Romania makes no exception.

In Romania, the frequency of colorectal cancer is rapidly rising. Both incidence and mortality have doubled during the last two decades reaching for instance, in 2011, an incidence of 23 / 100000 inhabitants. In 2012, 8240 new cases were reported, placing Romania among the countries with a medium incidence. In the last two years, colorectal cancer has advanced to being the second cause for cancer death, after bronchial and

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lung cancer and above gastric cancer. In 2010, 4150 patients died of colorectal cancer (19,05 / 100000) and 4860 in 2012.

Furthermore, there are particularities in regard to the geographical distribution of the incidence of colorectal cancer, the latter being higher in certain regions of Transylvania.

In spite of being considered a disease of the elderly, in the last years we have noticed a drop in the average age of the patients newly diagnosed with colorectal cancer.

It is well known that patients in whom colorectal cancer is diagnosed very early have good chances to be cured, whereas a more advanced stage is associated with poor outcome. Also, it is known that most of colorectal cancers arise from polyps (adenomas), which grow slowly within the digestive tract and which, after more than 10 years, undergo a malignant transformation.

Thus, a screening programme for colorectal cancer based on colonoscopy is highly desirable not only to detect the disease in an early stage but to prevent its apparition altogether via removal of adenomatous, premalignant colon polyps. Large studies from England, Norway and the USA serve as proof of principle for these presumptions.

PURPOSE

In this timeframe, the Endoscopy Division of the First medical Department Sibiu has initialized a prospective study for colorectal cancer prevention with colonoscopy as screening method.

METHODS

During 2011-2013, we conducted a screening on a group of 1058 patients, hospitalized in the most majority in the Department of Internal Medicine of the County Clinical Emergency Hospital of Sibiu. The patients were admitted by the presence of suggestive colorectal symptoms or laboratory data.

The battery of tests used was:

- CBC,
- ESR,
- CRP, transaminases,
- Stool exam / hemocult test for detecting occult blood feces,
- Total colonoscopy.

We evaluated the role of endoscopy in disease incidence and mortality.

RESULTS

A total of 98 (9,26%) adenocarcinoma and 32 (8,9%) high grade dysplasia - carcinoma in situ - were detected and in 12 cases we found advanced adenomas.

A large number of polypectomies were performed.

The concepts of carcinoma in situ and advanced cancer, respectively, were applied according to the current TNM classification. In precocious cancer, the adenocarcinoma is limited to the epithelium without interruption of the basal membrane (TNM 0, high grade neoplasia). Stage TNM 1 has portions where the basal membrane is interrupted.

Carcinoma in situ can only be diagnosed by means of endoscopy and pathological exam, given the fact that symptoms are mostly absent.

The endoscopical therapy with a safety margin confirmed by pathologists is the curative therapy of choice.

In our study, 1058 colonoscopies were performed which helped finding 358 adenomatous polyps in 260 patients.

Of the total of 358 adenomatous polyps, 68 (18,9%) showed low grade dysplasia and 32 (8,9%) high grade dysplasia. 12 of the latter showed invasion in the submucosa.

The high number of diagnosed cases of colorectal cancer is the result of a much focused exam, since most investigated patients had either symptoms or paraclinical elements of suspicion. Most patients were recruited from our inpatient group.

We and others have noticed a drop in the age of newly diagnosed patients with colorectal cancer. This will have to be followed by an adjustment of the age for preventive colonoscopies.

CONCLUSIONS

In conclusion, we consider as essential to start and sustain the long-term national programme for the early detection of colorectal cancer and the correct identification of the variables of the study (minimum age, insurance level in the non-cooperating patients for the increase of the compliance level etc.).

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