Background

For most countries around the world, colon cancer is a key public health issue. The Globocan World Cancer Report 2008 estimates that 1.15 million people contracted the illness and 529,000 people died from it – and Globocan expects these numbers to rise to 1,400,000 and 650,000 respectively by the year 2020. Citizens from countries with a “Western lifestyle” are subject to a particularly high colon cancer risk.

Prevention is possible. Screening appears capable of decreasing colon cancer mortality and incidence rates. Colonoscopies serve to identify the illness in its preliminary and early stages, enabling the surgical removal of the affected tissue with higher rates of success (stage shift). And screening is a cost-effective tool – treating the cancer in its advanced forms causes substantially higher costs. Patients with a particularly high risk of contracting the disease due to their genetic predisposition will require specific surveillance protocols.

Screening tests currently in use and available as an option for patients include the guaiac and the immunological fecal occult blood test (gFOBT and iFOBT), the examination of the DNA for scaled-off tumor cells and imaging techniques such as the double contrast barium enema of the colon (DCBE), flexible sigmoidoscopy (FS), total colonoscopy (TC) and CT colonography (CTC). None of these methods, however, is capable of detecting each and every malignancy, while – in extremely rare cases – colonoscopies may even cause fatal injuries.

Quality screening in Europe

It is widely agreed that “quality screening schemes” must replace poorly coordinated and badly organised “wild” programmes. Such quality screening programmes are characterised by the existence of guidelines and national laws or regulations, a public funding cover, a definition of the eligible group, a population-based, central and personalised invitation/reminder system of the eligible group, central reading of stool tests, quality colonoscopy, central collection and scientific evaluation of results, definition of surveillance measures and intervals.

Some countries in Europe have already successfully conducted screening programmes that comply with all of these criteria. Slovenia is one of them.

The “old continent” will be provided in the next weeks with a new colon cancer screening guideline. Details have been announced. It is safe to predict that the guideline will focus on the implementation of “Quality Screening” that complies with all of the aforementioned criteria. Probably, the iFOBT, flexible sigmoidoscopy and total colonoscopies will be recommended. 22 out of 41 European countries currently operate a national screening programme, 14 applying the gFOBT and 2 the iFOBT while 6 leave it to their citizens to choose between the FOBT and a primary colonoscopy. Some programmes comply with all criteria of a well-organised quality programme.
Slovenia and its SVIT programme

Slovenia is one of those EU countries that have used their presidency of the European Union to drive forward public health policies, specifically to combat cancer. Thanks to their intelligent initiative, the results of a very promising pilot study into national colon cancer screening were already published in early 2010.1 2839 out of a sample of 3117 patients (91 %) who met the inclusion criteria and who were invited to take part in the trial returned the tests. Out of these, 7.5 % were positive, 3.2 % were not usable. Regrettably, only 193 patients who had returned a positive FOBT subsequently underwent a colonoscopy (71 %), which means that nearly a third were not subjected to further diagnosis. This is a considerable gap that will need to be closed, and the patients concerned must be informed about the potentially life-saving role that colonoscopy can play. This falls within the responsibility of the providers of medical care, either the GPs or the health centres. The adenoma detection rate of 59 % is high, and the proportion of advanced adenomas (31 %) is equally considerable. Ten out of 15 patients with invasive carcinomas were diagnosed while their illnesses were still in clinical stages I and II, a finding which is typical for a screening group and which may serve to confirm the belief that colon cancer screening can save lives. The 5-year survival rate of patients with carcinomas in the early clinical stages (I and II) is four times higher than that of patients with carcinomas in the later stages (III and IV).

The large number of adenomas and advanced adenomas reflects the age profile of the sample: all patients were between 64 and 68 years old. Obviously, you would expect to find a larger number of colon neoplasms here than in a typical cancer screening target group which for most European countries means patients who may be as young as 50 or 55. I assume that Slovenia will eventually go down that route, too, because otherwise, the risk is just too big that a substantial number of adenomas and carcinomas will either be detected too late or not at all.

References