

Colorectal cancer – Screening in Iran

Mohammad Reza Zali

Director, Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University, M.C., Tehran, Iran

According to the World Health Organization, more than 1.000.000 people are currently affected by colorectal cancers (CRC) worldwide. The risk of CRC has generally increased in some countries (including Iran) which once were considered low risk; and consequently, CRC is now amongst the three high prevalent cancers in Iran. According to the CDC department of Iranian Ministry of Health, CRC is the third most common cancer among Iranian women and the fifth among Iranian men and it is generally the second leading cause of death. Nonetheless, there are no guidelines for surveillance and screening of adenomatous polyps of colon and CRC in Iran.

Some other factors may depict a more promising perspective of the screening programs for CRC in Iran. Although the five-year survival rate of CRC can reach 90% in case of early diagnosis, only 20% of patients present with the disease confined to the colorectal wall. In fact, 68% present with lymph nodes involved, and 10% have distant metastasis at the time of diagnosis. Nevertheless, recent evidence affirms a declining pattern both in the incidence of CRC and its related mortality rate in developed countries. This reduction has been attributed to reduced exposure to risk factors and improvements in treatment, yet a large part seems to arise from the early screening,

and early prevention through polypectomy. Therefore, targeting the CRC screening at a larger number of adult population seems to yield a great benefit even in short term.

Iran because of its demographic characteristics, may benefit even more from screening programs. The age distribution of CRC has shifted towards lower ages and unfortunately, half of Iranian CRC patients are currently aged less than 50 years. According to the facts mentioned above, conduction of screening and surveillance programs sounds highly beneficial; however, the necessity of conducting such programs and the exact methods of performing them should be more thoroughly investigated and determined.

At first, the epidemiology of CRC and adenomatous polyps should be determined according to data banks, registry systems and conducted studies, and the target population should be properly addressed. Then, measures should be taken to determine the high risk groups for CRC in order to promote the early diagnosis. However, actions should not be confined to just determine the vulnerable groups. In other words, all groups of people who might benefit of screening interventions should be included in programs and cost-benefit estimates.

But the question is how beneficiary will the people actually be from wide conduction of screening programs? The question seems nonsense at first look, because we naturally consider the early diagnosis and intervention much simpler and

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Reprint or Correspondence: Mohammad Reza Zali, MD, FACP. Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University, M.C., Iran.

E-mail: article@rcgld.org

more effective than late measures. But the fact is that the outcome of CRC screening programs should be assessed just like other sorts of health services. Besides, it should be determined which method of screening yields a better outcome. It should also be investigated how the two phenomena of 'spontaneous cure' and 'extreme shortness of preclinical phase', if these really occur, might influence the cost-benefit dimensions of our screening programs.

So, randomized and non-randomized studies are needed for the assessment of the efficacy of screening programs; however, before reaching a

consensus in this regard, which might be too time consuming, conduction of screening programs regarding the CRC would be rather a matter of moral decision making instead of being based upon evident facts. The prevalence of disease, its hygienic burden, applicability of screening programs and the possibility of early diagnosis, demographic characteristics of the society, availability of treatment modalities for positive screening tests and finally, the cost-benefit of the whole procedure will determine whether or not some program should be conducted.