

Initial guidelines for colorectal cancer screening in Saudi Arabia: a beginning

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Colorectal cancer (CRC) has become a public health concern in Saudi Arabia given its incidence, relatively early median age at diagnosis, and because the presentation is usually at an advanced stage. Alsanea and colleagues¹ have put forth the first national guidelines for CRC screening in Saudi Arabia, which is a long awaited major milestone in an attempt to establish a coherent national policy aimed at decreasing the incidence and mortality from CRC in this country.

The guideline presents recommendations on the age of initiating and stopping screening for CRC in average-risk individuals. It also contrasts different screening modalities, which is an important issue at this stage in which a nationwide CRC screening program is being considered. Unfortunately, the guidelines do not discuss the possible risk factors that might be associated with the development of CRC in the Saudi population, nor the approach to high-risk groups of patients, or important considerations relating to the use of fecal immunochemical testing (FIT) as opposed to guaiac-based fecal occult blood testing or fecal DNA detection.

Cost-effectiveness analyses for CRC screening in the Saudi population are lacking, but extrapolating from other populations, the guidelines recommend multiple options for screening, but mainly colonoscopy and stool testing. In contrast, it appears that fecal DNA detection, computed tomographic colonography (CTC), and capsule endoscopy are not cost-effective compared to other modalities.² Recently, the draft recommendations from the United States Preventative Service Task Force (USPSTF) on CRC screening raises a number of issues that need to be addressed when considering these technologies as a CRC screening modality.³ Furthermore, the European Society of Gastrointestinal Endoscopy and European Society of

Gastrointestinal and Abdominal Radiology did not recommend CTC as a primary test for population screening or in individuals with a positive first-degree family history of CRC.⁴ In the current guidelines, CTC use was only recommended in certain circumstances, which is in keeping with the European guidelines. Also, the test performance of different screening modalities in the Saudi population is limited⁵ and data on the acceptability of CRC screening are lacking.^{1,6,7} This limitation in local data has resulted in recommendations for screening and surveillance intervals after an initial screening modality that are extrapolated from other populations, but this has also been the case in other guidelines.⁸

The USPSTF on CRC screening also addressed the issue of extending screening for CRC beyond the age of 75 years and recommended only continuing screening in older patients under specific circumstances and not as a general rule. The optimal screening strategies for CRC according to a set of new decision models completed for the USPSTF include annual use of FIT, flexible sigmoidoscopy every ten years with an annual FIT test, or a colonoscopy every ten years, respectively, resulting in gradually increasing years of quality of life, but also increasing the need for more colonoscopies to be performed at the society level.³

In addition to the issues mentioned earlier, the upcoming guidelines should address whether to use qualitative or quantitative FIT as the latter has the advantage of flexibility in adjusting the cutoff value at which a test is considered positive, depending on available data from the literature and local resources (number of downstream colonoscopies), as was endorsed by the Asia Pacific consensus recommendations on CRC screening.⁸

If a colonoscopy based strategy is adopted, a strict quality-control process should be emphasized, as we

know that there is wide variability in adenoma detection rates between endoscopists.⁹ This wide variability results in an increased incidence of interval CRC after a negative colonoscopy^{10,11} in addition to the variability that occurs in the performance of an individual endoscopist depending on his or her workload.¹² The current guidelines only briefly mention this issue.

This current guideline will promote opportunistic CRC screening on a healthcare provider level; however, to harness the maximum benefit of a population-based screening program, multiple levels of intervention should be targeted at the level of policy makers and healthcare providers as well as the general public.¹³ The challenge will be how to implement such a program in the current healthcare system in Saudi Arabia and whether the private sector would be included in this program; if so what would be the best way to assure the quality of the screening process and adherence to the recommendations put forth. Indeed, this has been a challenge in the United States where half of those screened who had a normal colonoscopy had a repeat colonoscopy in less than 7 years,¹⁴ and about a third of those in Canada in less than six years.¹⁵ Furthermore, such a national pro-

gram would require a robust health information system that integrates data from population registries, cancer registries, laboratories, endoscopy centers and primary healthcare providers similar to the Dutch system.¹⁶ A further resource to be developed could be clinics devoted to CRC screening with dedicated staff, which has been shown to have a strong positive impact on the use of screening services.¹³

The Joint Advisory Group (JAG) on gastrointestinal endoscopy is a model worthy of examination. The JAG provides accreditation for endoscopist performing screening colonoscopies within the NHS bowel cancer screening program with strict criteria, with the aim of increasing the yield of colonoscopies performed and decreasing complications resulting from inaccurate as well as incomplete examinations.

We hope that this guideline marks the beginning of a process that will incorporate both policy and organizational changes that will ensure that eligible individuals are systematically enrolled in some form of organized CRC screening program, and that specialized professional bodies are actively involved and contributing their expertise to such an initiative.

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