



LETTERS TO THE EDITOR

Surveillance colonoscopy practice in Lynch syndrome in the Netherlands: A nationwide survey

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Abstract

Lynch syndrome, or hereditary nonpolyposis colorectal cancer (HNPCC), is the most common genetic disorder predisposing to colorectal cancer. As regular colonoscopic surveillance has been shown to reduce the incidence of colorectal cancer, this strategy is recommended worldwide. Recently, several advances in colonoscopic techniques have improved detection rates of neoplasia in Lynch syndrome. In this nationwide survey, we evaluated current surveillance colonoscopy practices for Lynch syndrome in the Netherlands and the extent to which advanced techniques have been adopted in routine clinical practice.

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Key words: Lynch syndrome; Hereditary nonpolyposis colorectal cancer; Colonoscopy; Surveillance; Chromoendoscopy

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TO THE EDITOR

Lynch syndrome, or hereditary nonpolyposis colorectal cancer (HNPCC), is caused by germline mutations in mismatch repair (MMR) genes. HNPCC is the most common hereditary disorder predisposing to colorectal cancer (CRC), accounting for up to 5% of cases. Carriers of MMR gene mutations are recommended to undergo surveillance colonoscopy once every 1-2 years starting

at the age of 20-25, a strategy which has been shown to reduce CRC mortality^[1,2]. Despite this approach, which is internationally recommended^[3-5], interval cancers can be encountered^[6]. Therefore, the identification of high-risk precursor lesions in Lynch syndrome is considered critically important. It is well known that conventional colonoscopy has a confirmed miss rate for colorectal neoplasms of up to 20%, especially small adenomas^[7]. This is of particular importance in Lynch syndrome patients since even in adenomas as small as 5-7 mm, high-grade dysplasia can be encountered^[8]. Recently, chromoendoscopy using indigo carmine was reported to increase the diagnostic yield in HNPCC patients^[9,10]. Also, several improvements involving endoscopic such as magnifying endoscopy (ME) and narrow-band imaging (NBI) techniques have recently been introduced^[11]. The role of these techniques in the clinical arena, especially in the management of Lynch syndrome patients, is still unclear. In this study, we evaluated adherence to the current guidelines for HNPCC surveillance in the Netherlands. We also surveyed the current use of new diagnostic colonoscopic techniques.

All Lynch syndrome families registered at the Netherlands Foundation for the Detection of Hereditary Tumors were reviewed. The physicians that had undertaken responsibility for these families were sent a questionnaire in which they were asked to provide data on the frequency of colonoscopic surveillance and the age at which surveillance was initiated. The current use of advanced endoscopic techniques such as chromoendoscopy, ME and NBI were also evaluated along with the physicians' expectations regarding the use of these techniques in the near future. Reimbursements for regular colonoscopic surveillance in Lynch syndrome subjects are generally authorized in the Netherlands.

Of the 446 questionnaires sent out, 228 were returned (51%). 221 out of 228 physicians (97%) adhered to the recommendation of performing surveillance colonoscopy every 1-2 years, with most physicians preferring a 2-year interval. Most physicians indicated they initiated surveillance when subjects at risk were between 25-30 years of age. The majority of physicians (196, 86%) used only conventional videocolonoscopes in their current surveillance management. The remainder of the consulted physicians regularly used advanced colonoscopic techniques, most often magnifying or high-resolution endoscopy (6%), followed by chromoendoscopy (5%) and narrow-band imaging (3%). Interestingly, 50% of the physicians expected to alter their endoscopic surveillance practices in the near future. In most cases, physicians

intended to use chromoendoscopy with indigo carmine as their standard endoscopic technique with this patient group.

In summary, there is excellent adherence to published guidelines on colonoscopic surveillance management in Lynch syndrome patients in the Netherlands. Most physicians presently use a conventional colonoscope for their regular surveillance colonoscopies. The recent introduction of new endoscopic techniques, especially chromoendoscopy, will probably be incorporated into surveillance management of this patient group in the near future. Whether Lynch syndrome patients really benefit from the introduction of these techniques, by a reduction in incidence of colorectal neoplasia, remains to be determined.

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