

Recommendation to include colorectal cancer screening in public health policy

The European Group for Colorectal Cancer Screening*

Colorectal cancer is a major cause of morbidity and mortality in industrialised countries, especially in Europe. However, it can be cured by detection of early stage cancers and even prevented by removal of adenomas. The simplest and most generally available screening method for colorectal neoplasia is periodic stool testing for occult blood, followed by a diagnostic examination of the whole bowel (colonoscopy) in those screening positive. This screening was proposed in 1970 in the USA and has been evaluated extensively in many countries since then.

In Europe the results from two large randomised population screening trials were reported in 1996 (England and Denmark); other trials are still being evaluated (France, Sweden, Czech Republic). In the USA two controlled trials (one of which was randomised) have been carried out. Large scale population screening programmes, funded by governmental health agencies, are in place in Germany, Japan, and USA; others are scheduled to be implemented in Australia and Israel; and to verify the feasibility of a nationwide screening programme two important pilot studies are scheduled to start in Great Britain.

The European Group for Colorectal Cancer Screening, an expert panel meeting regularly over the past 12 years, has examined the vast body of scientific data accumulated from these and other studies around the world. There is striking uniformity of results, proving a benefit from screening.

The expert panel concludes that there is unequivocal evidence that repeated fecal occult blood testing with Hemoccult significantly reduces colorectal cancer mortality. The degree of reduction depends mainly on the participation rate of persons being tested (compliance), the screening frequency, the number of screenings that each person has, and the compliance of those screening positive with the diagnostic follow up examination.

The mortality reduction from randomised controlled trials of biennial testing is in the range 15-18% with Hemoccult. The *programme sensitivity* (proportion of cancers detected with repeated testing over time) of fecal occult blood screening with guaiac based tests has been reported to be in the range of 50-60% as colorectal neoplasia (adenomas and cancers) bleed intermittently and blood is unevenly distributed in stools. However, *programme specificity* is 98% (false positive rate 2%). Further studies are being done to determine the most efficient fecal occult blood test methods. In addition, the feasibility and acceptance of diagnostic procedures like flex-

ible sigmoidoscopy and colonoscopy are being evaluated as screening tools.

There is an urgent need and sufficient scientific evidence available to justify implementation of colorectal cancer screening today.

Therefore, the European Group for Colorectal Cancer Screening strongly recommends the implementation of repeated, fecal occult blood screening for asymptomatic adults aged 50 and over, with colonoscopy done in those screening positive as the first step in reducing colorectal cancer mortality in Europe.

The diversity of healthcare systems and financial and endoscopic resources in our respective countries, probably do not allow a uniform approach to colorectal cancer screening. However, European and national guidelines should be produced—which include quality assurance requirements—to achieve effective screening programmes. In conclusion, the group urges all concerned to introduce, without delay, colorectal cancer screening as was done successfully for cervical and breast cancer screening.

Appendix 1

Dr Lucio Bertario (Italy): chairman; Professor Jean Pierre Bader (France); Professor Stavros S Besbeas (Greece); Dr Hans Brevinge (Sweden); Dr Guido Castiglione (Italy); Professor Massimo Crespi (Italy); Professor Gerard Dubois (France); Professor Jean Faivre (France); Professor Premysl Fric (Czech Republic); Dr Attilio Giacosa (Italy); Dr Reinhard Gnauck (Germany); Professor Jack D Hardcastle (UK); Dr Juan M Herrerías Gutiérrez (Spain); Dr Ole Dan Jørgensen (Denmark); Dr Ole Kronborg (Denmark); Professor Giancarlo Maltoni (Italy); Professor Jürgen Wahrendorf (Germany); Dr Marco Zappa (Italy); Dr Miroslav Zavoral (Czech Republic).

Relevant publications (selection)

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Correspondence to:
Dr Lucio Bertario, Istituto Nazionale per lo Studio, e la Cura dei Tumori, 20133 Milano, Via Venezian 1, Italy.

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* Members of the European Group for Colorectal Cancer Screening are listed in Appendix 1

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