WHAT IS COLORECTAL CANCER?
Colorectal cancer ("colon" or "bowel" cancer) is the third most common cancer in the UK and every year about 35,000 new cases are diagnosed. Most cases start as small polyps, which are benign growths or protrusions in the lining of the bowel. Possible causes include environmental or dietary factors and some people may have a genetic predisposition. It is estimated that an average-risk person aged 60 years has a 25% chance of having a colonic polyp. Pre-emptive screening involves the routine investigation of apparently healthy people in search of polyps or early cancers. Polyps can easily be removed before they become cancerous and colorectal cancer can often be completely cured by surgery as long as it is caught early enough.

Small polyps and early cancers often cause no symptoms at all. Rectal bleeding is an important clue and should be reported to the doctor but most people will have a simple cause such as haemorrhoids ("piles"). Screening is designed to detect abnormalities before the development of symptoms such as bleeding.

NB: people with symptoms of possible colorectal cancer (change in bowel habit, bleeding etc.) are not candidates for screening and should be referred for investigation.

Screening methods vary from simple testing of a stool sample for hidden blood ("occult blood") to the full examination of the colon with a flexible endoscope ("colonoscopy"). Occult blood testing is useful in population screening but it is insensitive and only detects polyps or cancers if they are bleeding at the time. Examination of the lower bowel ("flexible sigmoidoscopy") is widely used but only detects abnormalities in the lower 1/3 of the colon. Full colonoscopy is the most accurate way of detecting abnormalities and also enables polyps to be removed and suspicious areas biopsied.

WHO SHOULD BE SCREENED?
The lifetime risk of dying from colorectal cancer in the general population is 1:50. This drops to 1:17 in those with a first-degree relative (parent, sibling or child) aged over 45 and 1:10 if the relative is younger than 45 years. In people with 2 first-degree relatives with colorectal cancer the lifetime risk is 1:6.

The British Society of Gastroenterology recommends that people with 2 first degree relatives with colon cancer, or 1 first degree relative less than 45 years old with colon cancer, should be referred for full colonoscopy when they reach the age of 35-40 years.

In people with no known risk factors, the role of screening is usually discussed on an individual basis. 75% of people developing colon cancer have no family history of the condition.

The American College of Gastroenterologists now recommends colonoscopy in all people once they reach 50 years of age and the US insurance companies cover this.

In some groups of people the need for screening is clear, such as those with certain genetic diseases, people with extensive ulcerative colitis and those who have had previous polyps or cancer of the bowel. People who have had previous polyps are entered into a surveillance programme of regular colonoscopies at 1 – 5 year intervals depending on the size and type of polyps. After colon cancer resection it is recommended that colonoscopy is done every 5 years until the age of 70 years.

COLONOSCOPY – REAL OR VIRTUAL?
Done by a well-trained and experienced doctor colonoscopy is a very safe, day-surgery procedure. It requires a 24-hour liquid diet and 2 doses of a strong cleansing laxative the day before. The examination is usually done under a mild sedative and takes 15 – 45 minutes. Complications, such as bleeding after a polyp has been removed, are rare and are usually easily dealt with.

CT colonography ("virtual colonoscopy") is a new technique using computer-enhanced CT scan images. It takes only a few minutes and is proving to be almost as accurate as colonoscopy in detecting even very small polyps. Bowel cleansing is still needed before the examination but no sedation is necessary. The only disadvantage is that, if a polyp or cancer were seen, a “real” colonoscopy would then be needed to remove it. In the future genetic testing may be used to identify those who would benefit from colonoscopic screening.

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