SCREENING

12. **Little Adherence to FOBT Screening**  (Sept. 18/10)

Fecal occult blood test (FOBT) is an effective colorectal cancer screening method, but it needs to be repeated every one or two years to reduce the risk of dying from colon or rectal cancer. But almost half of a group of insured patients initially screened with fecal occult blood testing didn’t follow-up with another FOBT within two years, as recommended. A large insurance health plan found 11,000 people who had been screened with FOBT during a 2 year period. They then looked to see if they’d had another FOBT or other colorectal cancer screening exam within the following two years. Nearly a half (46.8%) didn’t. Having gone to the doctor for a preventive health checkup rather than for treatment of an illness made a difference. Those people who had a preventive health visit during the 2 years following their first FOBT were 11 times more likely to have had a follow-up test. Researchers concluded that longitudinal adherence with FOBT screening was low in this insured population, potentially compromising its effectiveness in population CRC mortality reduction. Interventions to promote adherence may be necessary to achieve high effectiveness in population-based FOBT screening programs.

**FOBT Kit**

![FOBT Kit](http://www.health.gov.on.ca/en/ms/coloncancercheck/public/fobt/fobt_hometestkit.aspx)


13. **Screening for Colorectal Cancer Through A Small Amount of Blood**  (Oct. 4/10)

At the recent International *Conference on Molecular Diagnostics in Cancer Therapeutic Development*, researchers announced a new colon cancer screening test. What makes this test so exciting is that it may be able to detect early colon cancer with a blood test. The experimental colon cancer screening test starts with a small piece of genetic material called **micro RNA**. Micro RNA helps to regulate genes, which are the instruction manual for running cells in the human body. Micro RNA is a bit like a switch, helping to determine which genes are turned on or off at any given time. It turns out that micro RNA can be detected in the blood. The micro RNA that comes from cancer cells is somewhat different than the micro RNA that comes from healthy cells. By detecting the abnormal micro RNA from colon cancer cells, researchers hope to detect the presence of colon cancer before symptoms even arise. If the blood test shows cancer is present, a person can undergo colonoscopy or another type of test that allows for direct views of the colon. Small tumors can be removed before they become larger and spread to other areas of the body. Colon cancer is easier to treat and cure if detected before it spreads...
beyond the colon. This screening test is still in the experimental phase, but researchers hope to validate the method as reliable and accurate with further testing in larger groups of people.


The results of two randomized controlled trials of unsedated colonoscopy comparing water infusion versus air insufflation to distend the colon both showed that patient tolerance with the water method during unsedated colonoscopy was greater than with air insufflation and enhanced patient willingness to undergo a repeat unsedated exam; however, the cecal intubation and adenoma detection rates varied somewhat between the two studies. Unsedated colonoscopy is common worldwide, but in the United States, conscious sedation is dominant and deep sedation is gaining support. Without sedation, the exam can cause discomfort due to the air pumped into the colon which causes the colon to stretch in order to more easily insert the colonoscope. Scheduled unsedated colonoscopy has been requested by seven percent of U.S. patients. In unsedated patients, discomfort during colonoscopy limits cecal intubation (colonoscope insertion reaching the cecum, which is the pouch that marks the beginning of the large intestine also known as the colon), which is essential for a complete exam. Methods for reducing discomfort have included several water-related techniques. Researchers at Veterans Affairs Healthcare System facilities in California developed a novel water method for scheduled unsedated colonoscopy using water infusion in lieu of air insufflation to more comfortably open the colon and insert the colonoscope. In their observational study of veterans, they showed that the novel water method enhanced cecal intubation and patient willingness to undergo a repeat scheduled unsedated colonoscopy. In this prospective, randomized controlled trial, the researchers’ objective was to confirm these beneficial effects. From November 2007 to April 2009, eighty-two veterans underwent scheduled unsedated colonoscopy by either the air method (40 patients) or water method (42 patients). The main measurements were discomfort and procedure-related outcomes. The colonoscopies were performed by a single colonoscopist without registered nurse support. The study confirmed that the water method significantly enhanced cecal intubation and patient willingness to undergo a repeat scheduled unsedated colonoscopy. The cecal intubation rate in the water group was 98%, significantly higher than that in the air group which was 78%. The percentage of patients reporting a willingness to repeat a scheduled unsedated colonoscopy was also significantly higher at 93% for the water group compared to 78% with the air group. The proportion of patients with at least one adenoma (precancerous polyp) showed a trend in favor of the water group at 36%, versus 23% in the air group. This trend was present for all indications in the proximal colon and for polyp size of 10 mm or larger. The cleansing effect of the water might have contributed to the higher adenoma detection yield. The adenoma detection rates were comparable to those in sedated colonoscopy.

Colonoscopy Procedure
15. **7% or More of Colorectal Cancers May Be Missed by Colonoscopy** (Oct. 6/10)

Colonoscopy screening may miss as many as one in every 13 colon cancers, according to this new study. In the study, Canadian researchers identified almost 5,000 Manitoba residents ages 50 to 80 who were diagnosed with colon cancer between 1992 and 2008. The team found that about eight percent, or one in every 13 cancers, had been missed during colonoscopies conducted six months to three years prior to diagnosis. Women were a third more likely to have had their cancer missed. During a colonoscopy, a flexible camera is passed through the colon in search of abnormal growths known as polyps and other warning signs of early tumors. It is one of a few screening tests for colon cancer, the second-leading cancer killer in Canada. Women were a third more likely to have had their cancer missed, report the researchers and general practice physicians missed cancers 60% more often than gastroenterologists. There are three likely reasons for these “misses,” noted by the researchers. Tumors may simply have gone unidentified on the exam, or were seen but not completely removed. While rare, they also noted that it is possible that an undetected cancer was actually not present at the exam, but rather grew very quickly afterwards. No improvement in colonoscopy can do anything to avoid the latter. But the first two reasons are potentially avoidable.

*Singh, Harminder, et al., Rate and Predictors of Early/Missed Colorectal Cancers After Colonoscopy in Manitoba: A Population-Based Study. Am J Gastroenterol Advance online publication 28 September 2010; doi: 10.1038/ajg.2010.390*

16. **Screening For Advanced Colon Cancer Patients Not Beneficial** (Oct. 14/10)

According to this study, a considerable amount of patients with advanced cancer continue to undergo cancer screening tests that do not have a meaningful likelihood of providing benefit. For the study, cancer screening procedures (mammography, Papanicolaou test, prostate-specific antigen [PSA], and lower gastrointestinal [GI] endoscopy) were assessed in 87,736 fee-for-service Medicare enrollees aged 65 years or older diagnosed with advanced lung, colorectal, pancreatic, gastro-esophageal, or breast cancer between 1998 and 2005. Researchers followed up with the participants “until death or Dec. 31, 2007, whichever came first,” according to the study’s abstract. A group of 87 307 Medicare enrollees without cancer were individually matched by age, sex, race, and SEER registry to patients with cancer and observed over the same period to evaluate screening rates in context. For each cancer screening test, utilization rates were defined as the percentage of patients who were screened following the diagnosis of an incurable cancer. For all patients following advanced diagnosis compared with controls, lower GI endoscopy was received by 1.7% vs. 4.7%. Researchers concluded that a sizeable proportion of patients with advanced cancer continue to undergo cancer screening tests that do not have a meaningful likelihood of providing benefit.