



False negatives

Although not yet ready for clinical application, a new screening test, using stool specimens, could detect early colorectal cancer. The earliest detectable molecular abnormality in both familial and sporadic colorectal cancer is a mutation of the adenomatous polyposis coli (*APC*) gene. Recently, researchers from the United States and Sweden overcame major technical hurdles to detect *APC* mutations in the faecal DNA of patients with colorectal tumours. *APC* mutations were detected in stools of 26 of the 46 patients with neoplasia, and none of the 28 control patients. Six (of 12) patients whose neoplasia was not detected with the stool screen were found to have *APC* mutations in their tumours. Thus, 78% of patients (95% CI, 65%–89%) had mutations potentially detectable by this new assay. So far the assay appears to be highly specific but is lacking sensitivity.

N Engl J Med 2002; 346: 311-319
N Engl J Med 2002; 346: 302-304

False assumption

A recent report from a large epidemiological study challenges the belief that 8 hours' sleep per night is ideal. The association between sleep duration and mortality risk was examined in the Cancer Prevention Study II. More than a million Americans completed a health questionnaire in 1982, including questions about sleep duration. In 1988 it was possible to determine survival, or date of death, for 98% of participants: 636095 women aged 57 (SD, 11) years and 480841 men aged 58 (SD, 10) years. Adjustments were made for 32 variables found to be predictive of mortality risk. Men

and women who reported sleeping 7 hours per night were least likely to have died. Those who reported sleeping ≥ 8 hours experienced significantly increased mortality hazard, as did those who slept ≤ 6 hours. The risk was increased by more than 15% for those sleeping >8.5 hours or <4.5 hours.

Arch Gen Psychiatry 2002; 59: 131-136

False promises?

A Cochrane review has concluded that there is little evidence for or against the effectiveness of over-the-counter cough preparations. To be included, studies involved persons aged ≥ 16 years with cough of less than three weeks' duration and of presumed viral origin, and no signs on auscultation or x-ray of the chest. Outcomes included frequency and severity of cough. Only 15 randomised, placebo-controlled trials, involving 2166 participants, could be included in the review. Study quality was not high, with details of randomisation or blinding often absent, or studies too small to detect clinically important differences. Five trials of antitussives, two of expectorants, two of antihistamine-decongestant combinations and three of other combinations had conflicting results. A positive trial of a mucolytic was of poor quality and, based on two trials, antihistamine was no more effective than placebo.

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True lies

People with high levels of post-traumatic stress are likely to be inconsistent in the accounts they give of a traumatic memory. More discrepancies occur with details that they consider peripheral, and with the passage of time. Thirty-five Bosnian and Kosovar refugees, who already had leave to remain in the United Kingdom, agreed to participate in research about memory. Using an interpreter, each was asked to recall both a traumatic and a non-traumatic event, then answer 15 standard questions about each event. Three to 32 weeks later, each person was asked to recall the events again and to answer the same questions. Overall, the mean discrepancy rate was 0.32 (95% CI, 0.28–0.36). Scores from a rating scale for post-traumatic stress were used to divide the group for comparisons. This research was prompted by concern that inconsistencies in recall currently undermine a refugee's credibility as a witness. This may be central to determining his or her refugee status.

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True images

A new non-invasive technique for imaging deep venous thrombosis (DVT) looks promising, even for detecting clots in the pelvis and calf. While other methods show the clot as a filling defect, Magnetic Resonance Direct Thrombus Imaging (MRDTI) detects the thrombus itself as a high signal against a suppressed background. A recent prospective study of MRDTI in the United Kingdom recruited 101 patients with suspected DVT immediately after routine venogram. An experienced radiologist, blinded to the venogram result (the "gold standard" for comparison), diagnosed DVT using MRDTI with high sensitivity (96% [95% CI, 89%–99%]; 51 of 53 tests) and specificity (90% [95% CI, 79%–96%]; 43 of 48 tests). MRDTI should have particular advantages in pregnancy, for patients in plaster and in diagnosing recurrent DVT.

Ann Intern Med 2002; 136: 89-98