



SYNOPSIS

Screening for depression with two questions

The US Preventive Services in the *Annals of Internal Medicine* (2002; 136: 765-776) endorsed screening for depression, but did not recommend a specific screening tool. Many of the screening questionnaires for depression are found to be too cumbersome and time consuming for routine use, and should be as uncomplicated as possible in general practice. Arroll *et al.*, writing in the *BMJ* (2003; 327: 1144-1146) propose that two verbally asked questions are sufficient to diagnose depression.

The two questions are: 'During the past month have you often been bothered by feeling down, depressed or hopeless?' and, 'During the past month have you often been bothered by little interest or pleasure in doing things?' The authors evaluated these questions as a screening tool in general practices in New Zealand. If either was positive, screening was regarded as positive.

The two questions showed a sensitivity and specificity of 97% and 67% respectively. Of 157/421 (37%) patients screened positive for depression, composite interviews revealed that 28 were true positives and 129 false, which gives a positive predictive value of 18%. Although the high sensitivity was accompanied by a high number of false positives, a reasonable trade-off exists between true and false positives, and clarification can be obtained by asking more questions or referral to a specialist.

A weakness of the study is that there was no non-screened group as a comparator.

The two-question verbal screening tool is, according to the authors, a good compromise between the time required to administer the screen and the likelihood of a positive diagnosis. The shortest other screening tool is written and contains seven questions.

Breast-feeding: does it affect blood pressure in later life?

It has been postulated that nutrition early in life may programme subsequent blood pressure. The influence of breast-feeding is of interest because of the low sodium and fat content of breast milk. Low sodium intake in infancy has been related to lower levels of blood pressure both in the short term and in the long term. Small observational studies suggest that breast-feeding may be related to noticeably lower blood pressure in childhood. Not all studies have published an association, though. A systematic review was recently published in the *BMJ* (2003; 327: 1189-1192) which sought to determine whether breast-feeding in infancy compared with bottle-feeding formula milk is associated with lower mean blood pressure at different ages.

Pooled mean differences in blood pressure between breast-fed infants and those bottle-fed formula milk from 29 selected studies were examined.

The results showed that the pooled mean difference in systolic blood pressure was -1.10 mmHg but with significant heterogeneity between estimates. The difference was largest in studies of <300 participants (-2.05 mmHg), and smallest in studies of >1 000 participants (-0.16 mmHg). Diastolic pressure was not significantly related to type of feeding in infancy.

The authors conclude: 'Selective publication of small studies with positive findings may have exaggerated claims that breast-feeding in infancy reduces systemic blood pressure in later life. The results of larger studies suggest that feeding in infancy has at most a modest effect on blood pressure, which is of limited clinical or public health importance. However, it must be emphasised that blood pressure is not the only relevant outcome of breast-feeding.' Benefits include improved neural and psychosocial development, potential protection against obesity and allergic disease, and lower cholesterol levels in later life.

Virtual compared with optical colonoscopy

Virtual colonoscopy is a rapidly evolving minimally invasive technique which could provide an attractive alternative to optical colonoscopy. Virtual colonoscopy is performed by inserting a small rectal catheter, and creating a pneumocolon immediately before a computed tomography (CT) scan. Both two-dimensional and three-dimensional images can be created.

A group of 1 233 asymptomatic adults underwent same-day virtual and optical colonoscopy. Image processing and interpretation was done by means of a software programme which generates an electronic image of the colon. This allows a 'fly-through' of a three-dimensional image of the colon, which is correlated with the two-dimensional image for any suspected abnormality. The sensitivity and specificity of virtual colonoscopy and the sensitivity of optical colonoscopy were calculated with the findings of a final unblinded optical colonoscopy as the reference standard.

The results showed that the sensitivity of virtual colonoscopy for adenomatous polyps was 93.8% for polyps at least 10 mm in diameter, 93.9% for polyps at least 8 mm in diameter and 88.7% for polyps at least 6 mm in diameter. The sensitivity of optical colonoscopy was 87.5%, 91.5% and 92.3% respectively. The specificity of virtual colonoscopy was 96%, 92.2% and 79.6% for the three sizes respectively. A malignant polyp was missed on optical colonoscopy before being revealed by virtual colonoscopy.

The authors of the report in the *New England Journal of Medicine* (2003; 349: 2191-2200) concluded that CT virtual colonoscopy with the use of a three-dimensional approach is an accurate screening method for the detection of colorectal neoplasia in asymptomatic average-risk adults and compares favourably with optical colonoscopy in terms of the detection of clinically relevant lesions.

FNS