

Less frequent Pap smears for low-risk women?

The United States Preventive Services Task Force (PSTF) has recently recommended that annual screening for cancer of the cervix be replaced by screening every 3 years in low-risk women. The reason cited for this change is the lack of direct evidence that annual screening leads to better outcomes. The American Cancer Society concurs with this view and has recommended the same interval in women over the age of 30 years who have had three consecutive negative cytological tests. However, many clinicians continue to resist these recommendations possibly due to the perception that there would be an unacceptably high excess risk of cervical cancer.

Recently, attention has been paid to the addition to the cervical cytology test (Papanicolau test — 'Pap' smear), of more sensitive tests, such as detection of oncogenic human papillomavirus (HPV) DNA. The combined test has been recommended by the American Cancer Society as a 'reasonable' alternative to cytological testing alone with the explicit recommendation that the test not be performed more frequently than every 3 years.

To determine the excess risk of neoplasia, groups of researchers in the USA led by George F Sawaya of the University of California, San Francisco, studied the records of over 31 000 women aged 30 - 64 who had had three or more consecutive negative tests. They found that the excess risk of cervical cancer was approximately 3 in 100 000 (*N Engl J Med* 2003; **349**: 1501-1509), which is roughly equal to the risk of breast cancer among men 45 - 64 years of age. This low risk may be lowered even further with improvements in the sensitivity of the Pap smear with new technologies, by the addition of the HPV DNA test, and with adherence to new guidelines for the interpretation and appropriate follow-up of abnormal Pap tests.

One of the limitations of the study is the determination of which patients are at low risk and which at high risk. The American Cancer Society includes factors such as age, screening history, type of Papanicolau test, and history of immunosuppression.

In the same issue of the *New England Journal of Medicine*, Sarah Feldman of the Brigham and Women's Hospital in Boston, USA, writes that cost-benefit analyses of cervical cancer screening have suggested that lifelong annual screening may not result in substantially better outcomes than less frequent screening, and is much more costly (2003; **349**: 1495-1496).



Feldman continues, 'Despite the guidelines indicating that the interval between screenings can be lengthened, both physicians and patients have been reluctant to change it. This resistance probably stems from several factors, including the success and simplicity of annual screening, patients' concerns about cancer, and physicians' concerns about medicolegal issues. The data presented in Sawaya's article may help to alleviate these worries.'

An additional concern is that if the interval between screenings is increased to 3 years, patients might inadvertently increase the intervals even further and be tested less frequently than 3-yearly. This could result in problems as 10% of cases of cervical cancer occur in women who have not had a Pap smear for the previous 5 years. If patients do move away from annual screening, doctors must ensure that they do not discontinue screening entirely. Given the fact that half of all cases of cervical cancer occur in women who have never been screened, screening all women at least once would probably contribute more to decreasing cancer-related mortality than continued annual testing.

What should practitioners do, given the evidence presented by Sawaya?

For patients who are in categories with low risk of cervical neoplasia, and who are known to comply with screening recommendations, it is reasonable to lengthen the screening interval to 3 years after three negative Pap tests. For patients in high-risk categories (history of cervical dysplasia or immunosuppression) or who do not comply with screening recommendations, it would be unwise to lengthen the screening interval. A shift to a longer interval must be accompanied by systematic safeguards to ensure that screening is sustained, and that women are tested regularly. The gains of the last 60 years may be lost if that does not happen.

For South Africa, this is an important approach, as anything that can reduce the burden on health care delivery services, and reduce costs, should be considered. This research may be of particular interest to medical aid societies.

FNS

IN BRIEF

The lighter side

The *Canadian Medical Association Journal* 2003 Holiday Review included these irreverent research reports:

Canadians have stored so much excess body fat that it could be used to power all of the 11.7 million homes in Canada for approximately 5 hours. 'Any efforts to reduce obesity ... will deplete the valuable energy reserves that have amassed in the adipose tissue of Canadians, thereby forcing us to continue using fossil fuels and impeding our ability to combat global warming.'

Nursery rhymes detail many incidents which could result in severe injury, but a medical opinion is seldom sought. Humpty Dumpty couldn't be put together again; the infant in 'Hush-a-bye baby' undoubtedly suffered great trauma when the bough broke; in 'Jack and Jill' does 'broke his crown' refer to a skull fracture, and furthermore, did Jill suffer injuries when she 'came tumbling after'? If the old man in 'It's raining, It's Pouring' bumped his head after retiring, foul play could be suspected; and of course 'Ring-a-Ring-a-Rosie' refers to the plague, but were any injuries sustained when they 'all fall down'?

A 'medically sound' nursery rhyme is suggested: 'Little Johnny rode his bike, /No helmet on his head./He took a fall and split his skull,/His mother feared him dead./She rushed him to the ER,/Where they checked his neuro signs./They noted a blown pupil/And inserted IV lines./They called the neurosurgeon,/Who came in and drilled a burr./Now Johnny's fine; he rides his bike,/But he's helmeted, for sure.'

(*CMAJ* 2003; **169**: various pages)

FNS