Sensible breast cancer screening

Screening for any number of medical conditions appeared to hold great promise. Their diligent application, lubricated by extra money squirted in that direction, seemed a seductive indication of very substantial reductions in morbidity and mortality. For emotional reasons and because of its apparently proven value, screening for breast cancer has occupied a central position. Dent and Panieri examined the evidence and come to conclusions (p. 354) some of which will not please the members of the screening industry. They note that there is incontrovertible logic to screening for breast cancer but that controversy continues to dog all types of screening.

Since it seems obvious that the smaller the cancer at discovery and treatment, the better the outcome, breast self-examination (BSE) should be taught and encouraged. However the results have been conflicting at best and a failure at worst, mainly because of lack of compliance (perhaps because women do not want to find cancer?). There would appear to be no evidence that BSE helps at all.

On the results of another major trial in the USA in which women underwent both breast examination and mammography, it can be deduced that in certain cases clinical examination is superior to mammography. But whether this would translate into survival is unknown.

All but one of prospective trials of screening mammography showed a reduction in breast cancer death. However questions that remain relate to the magnitude of the benefit and to its cost. The cost and the harms are significant! Though it is expensive and the cancer death reduction is small, mammography is probably a good thing to do.

The authors note in conclusion that the current recommendation in the UK is for 3-yearly screening over the age of 50 years.

HIV transmission during paediatric health care

The fact that an article appears in print in a respected medical journal is not absolute evidence that its findings and conclusions are true. As medical students this often seemed so to us but thankfully the modern medical curricula provide for critical analysis of published papers, which should enable a more informed opinion to be formed. The influential Cochrane reports and others that critically analyse large numbers of reports before delivering their findings further reinforce the importance of evidence-based medicine. Bridget Farham takes up the cudgels by examining the evidence for the recently published assertions by Gisselquist and colleagues that unsafe injections are a major mode of transmission of HIV-1 in sub-Saharan Africa (p. 342).

Farham concludes that taking Gisselquist's research in an uncritical way is dangerous in that it may lead to a reduction in the impact of the message that unsafe sex transmits HIV-1 — something for which the evidence is compelling. The problems around the re-use of disposable syringes should be to ensure sterile technique.

Really serious nose bleeds

Why should a rather specialised article on endovascular treatment of intractable epistaxis by Duncan and colleagues (p. 373) be accepted by the *SAMJ* and why should Editor's Choice draw its attention to the general readership?

Firstly, epistaxis is a common condition affecting an estimated 60% of the general population, of whom approximately 6% will seek or require medical assistance. The article provides a quick update on its management.

Secondly, the distinction is explained between most cases of epistaxis, which occur in the anterior nasal cavity, and the less frequent but more difficult to manage posterior variety. The anatomical importance of the rich blood supply and anastamosis of this region is described.

Thirdly, and perhaps the most important, is the marvel of the modern imaging machinery and exquisite microcatheters and accompanying gizmos. And of course also the knowledge, wisdom and dexterity of the operators!

Transcatheter embolisation is now an accepted and effective treatment for intractable epistaxis.

Caesarean section, spinal anaesthesia and cardiovascular instability

The use of regional anaesthesia in obstetric practice has increased and there has been a reduction in the number of anaesthesia-associated maternal deaths. But in South Africa morbidity and mortality associated with spinal anaesthesia remain high (although the case fatality for general anaesthesia is probably even higher in inexperienced hands). A consensus document has therefore been developed by a group of practitioners with a particular interest in obstetric anaesthesia to assist in improving the safety of spinal anesthesia in caesarean section (p. 367).

The two main life-threatening complications of spinal anaesthesia are severe cardiac instability in the form of catastrophic hypotension, and high motor neural blockade.

Pre-operative preparation of the patient is emphasised, as are the contraindications to spinal anaesthesia.

The pathophysiology of haemodynamic instability is described, including the facts that spinal anaesthesia for caesarean section is associated with sympathetic block and that aortocaval compression often leads to decreased blood supply to the uterus and reduced maternal venous return and cardiac output, and various co-morbid factors such as morbid obesity, valvular heart disease and pre-eclampsia.

The correct technique for spinal anaesthesia, the management of haemodynamic instability and other aspects of monitoring and of managing complications are dealt with in detail.

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