Canada’s new blood system nothing new for UK

Last August Dr. Nigel Legg, a consultant neurologist at Hammersmith Hospital in London, donated 3 pints of blood to himself so they could be used when he underwent a revision of a hip replacement. He was one of the few British patients to undergo autologous transfusion, and now he understands why: it took a lot of work on his part. Autologous transfusion is still rare in the UK and Sue Cunningham of the National Blood Authority (NBA) says that is because it is rarely required. In fact, hip replacement is one of the few elective operations where it is useful.

Throughout the UK, the demand for blood is rising. The 200,000 donations made in 1946 have risen to 2.5 million today, and the number continues to increase by 3% to 4% a year. The NBA was created in 1993 to replace the old National Blood Transfusion Service, which dated from 1946. The new authority covers England and North Wales; Scotland, Northern Ireland and Wales have their own centres for political reasons, but the small towns of North Wales are nearer to Liverpool than Cardiff and have, as it were, opted back into England. In the Irish republic there are regional centres in Dublin and Cork; there, as in Britain, blood is donated without remuneration and collected around the country in church halls, community centres and workplaces. The donors are usually called every 6 months.

The NBA maintains a national grid of blood supplies, and this has eliminated a lot of the regional shortages. In the 1980s it was common for operations to be cancelled because of shortages. “Now,” says the NBA’s Cunningham, “we haven’t had a panic since last January [1997], when we were down to a single day’s reserve of group 0 blood.”

Blood is supplied free to National Health Service hospitals, while private hospitals pay $75 per bag of red cells, which covers the cost of collection, processing, storage and delivery. Occasionally there is a small surplus of red cells, which can be sent abroad during emergencies. There is also a small surplus of blood products, and when available these are sold abroad at cost.

The NBA manufactures blood products, such as immunoglobulins and factor VIII, and only relatively small amounts are imported from the US and Europe. The occasional surplus is sold abroad, at cost.

Since the “mad cow” crisis hit the UK, donors are rejected if they have related risk factors: relatives who developed Creutzfeldt-Jakob disease, or if they received human-derived human growth hormone, dura mater or certain fertility treatments.

The fallout from the tainted-blood scandal of the 1980s continues to land in Europe. In France, 2 senior hematoologists were found guilty of failing to take sufficient measures to protect blood supplies from HIV contamination in the 1980s. One of them, Dr. Jean-Pierre Allain, had in the meantime been appointed professor of transfusion medicine at Cambridge University. Backed by strong support from his colleagues, he left Britain for France and served a 3-month prison sentence. While he was in jail, his job in Britain was kept open for him. — © Caroline Richmond

Physicians in difficulty

Quebec's physicians and hospitals are being reminded that they must intervene if they consider a physician unable to practise competently because of a psychologic or physiologic problem. As well, the physician has not sought treatment voluntarily, limited his or her practice, or stopped working. The Quebec College of Physicians notes that, according to the code of ethics, the safety of the public takes precedence over other considerations in these situations.

In most cases, physicians who are unable to practise competently do stop working. In the few cases where they don't, the treating physician or colleagues must disclose the situation and authorities at the institution involved or the college must take action. College spokesperson Brigitte Junius emphasizes that this type of disclosure is not a breach of confidentiality, but ultimately helps the physician concerned and protects the public.

The awareness campaign follows a recent case in which a pathologist was suspended and later retired. He had been treated for brain cancer since 1994. A subsequent review of medical records showed that while he was still practising between 1994 and 1997 he misdiagnosed 38 cases; 4 patients suffered significantly as a result.

In such situations, the college has the legal power to order a medical examination. However, this is a drawn-out procedure, and the college wants the government to change the Professional Code of Quebec to allow for more rapid intervention in emergency situations and to allow
Risk of dying on the waiting list

Deaths of patients on the waiting list for cardiac surgery in Ontario are uncommon but they are more likely among patients waiting for valve surgery than for a coronary artery bypass graft, a study involving all 29,293 Ontario patients scheduled for cardiac surgery from October 1991 to June 1995 has determined (Heart 1998;79:345-9). It also found that the risk of death while waiting for surgery was significantly higher for patients with impaired left ventricular function, for older patients and for men.

“There was a perception that death rates were high, and that's not true,” comments Dr. Christopher Morgan, the principal investigator, who is with the Sunnybrook Health Science Centre and University of Toronto. The study, conducted by the Cardiac Care Network of Ontario, used the network’s database of every patient accepted for cardiac surgery in the province and found that 141 patients (0.48%) died before surgery in the 42-month period. “Any mortality on the waiting list is of concern, but the rates are lower than those reported in some European studies,” says Morgan. He believes that this study is unique because it accounts for an entire population of people waiting for cardiac surgery over several years.

Longer waiting time for surgery was not a major contributor to the risk of death. The study found that waiting time had only a weak association with mortality. The waiting time for a coronary artery bypass graft in Ontario ranges from no delay to more than 180 days, with a mean of 38 days and a median of 18 days.

But needing valve surgery — with or without a bypass graft — significantly increased the risk of death, as did impaired left ventricular function. “We have already made a change to our scoring system [for surgery priority] based on these results,” explains Morgan.

The higher risk of death with advancing age is probably due to the higher rate of death from heart attack and ischemic syndromes among older people, since a previous Ontario study showed that being older is not correlated with having to wait longer for surgery. The increased risk of death among men is unexplained, and Morgan thinks that male sex may be a surrogate for other risk factors that were not captured in the database used in this study.

To cut the number of deaths further, the article concludes that waiting times must be reduced for all patients waiting for cardiac surgery. — C.J. Brown

Genetic risk factor for cervical cancer

A genetic variation raises the risk of cervical cancer sevenfold in women, British researchers have found (Nature 1998;393:229-34). Women with 2 copies of a variant of the gene for the tumour-suppressor protein p53 are 7 times more likely to have cervical cancer than patients with 1 copy of the variant gene. It has long been known that cervical cancer is caused by human papillomaviruses (genital warts), especially certain virus strains. However, this finding makes it clear that there is a genetic component to susceptibility.

Atrial fibrillation? Watch the fiddleheads!

Eating fiddleheads, the tasty fern fronds available in late spring, can lower a patient’s international normalized ratio (INR), according to a letter to the editor of the New England Journal of Medicine from Canadian physicians. The INR is carefully monitored in patients with atrial fibrillation. Fiddleheads contain high quantities of vitamin K1, leading to a transient lowering of the INR, which may raise concern about therapy for atrial fibrillation. In the reported case, the physicians instructed the patient to take an extra 5-mg dose of warfarin, and the INR soon returned to the therapeutic range.