## Warning for surgeons: measure twice, cut once

Something as simple as marking the patient's head with a felt pen could have prevented a recent case of "wrong-side surgery" at a Toronto teaching hospital, a neurosurgeon says.

Writing in the latest issue of the Canadian Journal of Surgery (CJS), Dr. Mark Bernstein reports that a 71-year-old man had a burr hole drilled in the wrong side of his head during an attempt to relieve a large frontal subdural hematoma (Can J Surg 2003;46[2]:144-6). A senior resident initiated the procedure without alerting neurosurgical staff. Bernstein, the staff neurosurgeon, did not arrive until 15 minutes after the error was reported by a nurse.

The resident realized a mistake had been made when no bleeding was found after the dura was penetrated. The procedure was then repeated on the correct side of the patient's head. Later, an urgent craniotomy was performed to remove a clot. The patient made a full recovery.

In his report, Bernstein says full disclosure was made to the patient's family immediately following the error, and no legal action has been taken.

Dr. William Beilby, managing director of risk management services at the Canadian Medical Protective Association (CMPA), says such incidents, while rare, are worrisome. "Our most recent analysis



of legal actions involving orthopedic surgeons that closed between Jan. 1, 1990, and Dec. 31, 1999, demonstrated that wrong-side, wrong-patient and wrong-level [in the spine] surgery accounts for 5% of our closed cases," he said. The average payment was \$150 000, but if the mistake involved the spinal cord potential awards are much higher. He said the CMPA's primary concern is that the mistakes are "completely preventable."

In 1993 the CMPA provided data on wrong-side surgery to the Canadian Orthopaedic Association (COA), which began encouraging surgeons to write their initials preoperatively on the site of the operation with a permanent marker. "Once the limb is prepped and draped," says Beilby, "surgeons only need to be certain they are [cutting] through their initials."

Beilby thinks the COA program has had a noticeable impact. "In 1990 we had 11 cases reported, and in 2000 there were only 5. Since the mid-'90s there was a more rapid improvement, presumably due to the COA program."

The COA Web site (www.coa-aco .org) contains guidelines for preventing wrong-side and wrong-level surgery.

Bernstein says the incident he reported is the first case of wrong-side surgery he has seen during 17 years of practice and 7 years of residency. However, he is "aware of numerous near misses and personally [has] knowledge of at least 2 cases involving other surgeons that had major consequences for the patient."

In an editorial accompanying the *CJS* article, coeditor Jonathan Meakins said Bernstein had been "courageous" to present the case as a learning tool. He said other surgical specialties must follow the lead of orthopods, who "have integrated the principles [of preventing wrong-side, wrong-level surgery] into their training programs so residents have role models and see that it is normal to initial the site and to communicate with the patient and with the team in the operating room. All training programs should do the same."

Bernstein said full disclosure should be made as soon as a "wrong-side" mistake has been made. "Ethically, it is simply the right thing to do," he said. "In

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this case the family appeared to appreciate my openness, and there is some evidence in the literature that openness may decrease medicolegal action. However, I suspect that the main reason they didn't take action against me was that the error had zero impact on the patient's outcome, and he had a good outcome."

Beilby said the CMPA agrees that disclosure of adverse clinical events to patients is important, but it wants legislation to attach privilege to quality-assurance and risk-management disclosures that take place in jurisdictions such as Ontario, where no privilege currently applies. If this happened, information generated from participation in a broader examination of the issues involved in the adverse event, such as discussions, comments or notes, could not be used in any court or disciplinary action against the physician.

Bernstein says a crucial lesson emerged from this mistake. "Wrong-side surgery ... should almost be considered the archetypal surgical error in which simple but intelligent systems approaches should be able to reduce its incidence to zero." — Patrick Sullivan, CMAI

## **Relocation affects patients**

First Nations patients who relocate from rural areas to cities for dialysis face significant challenges, the *Canadian Journal of Rural Medicine* reports (2003;8[1]:19-24).

Researchers interviewed patients from across Northwestern Ontario who had been undergoing dialysis for from 6 months to 5 years. Patients who had to leave home for treatment had physical symptoms, such as loss of appetite, following the move, and also felt less independent because they were less self-sufficient and missed being able to contribute to their own community. "I don't have any friends any more," said one. — Brian Whitwham, CMAJ