Afghanistan war poses unique challenges for military MDs

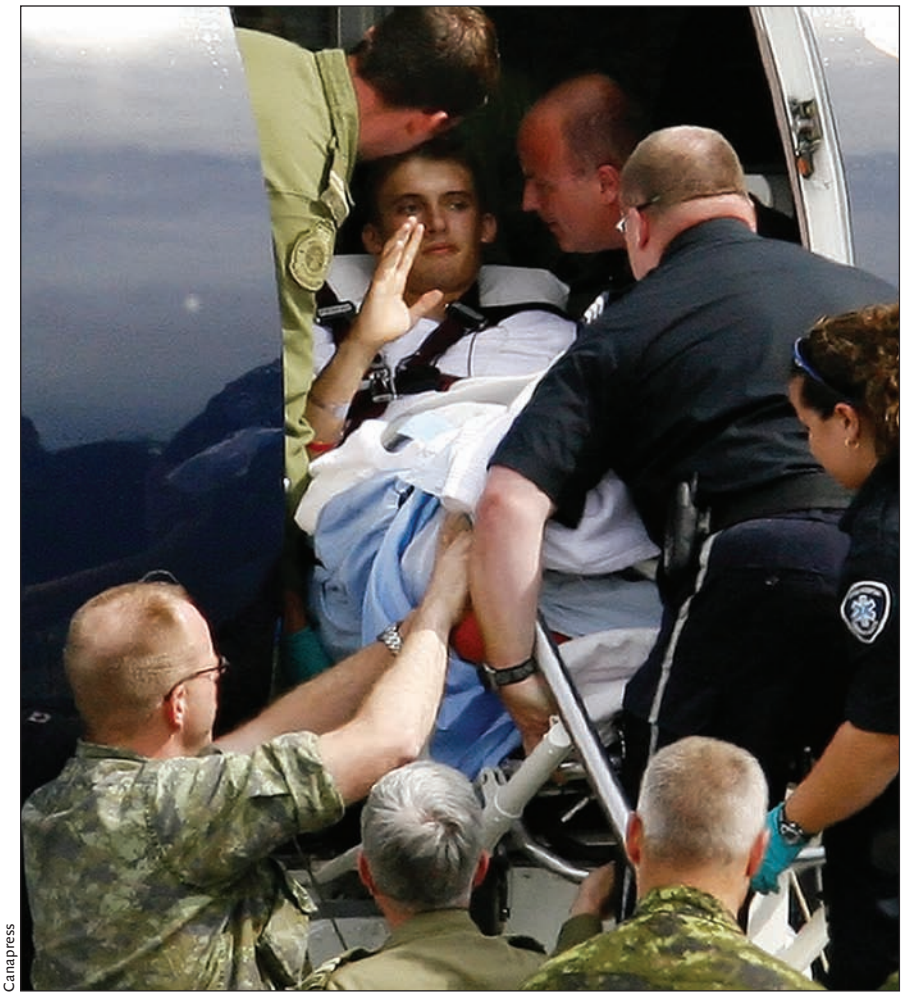
It has, to be sure, been a long journey for Pte William Salikin since a suicide bomber drove an explosive-filled taxi into an enclosed jeep in which the 22-year-old was riding in Kandahar last January.

The explosion took the life of Canadian diplomat Glyn Berry and might well have cost Salikin's, had he not been well served by body armour — particularly a Kevlar vest that protected his torso — and the quality of medical care provided to troops stationed in Afghanistan.

In Salikin's case, the latter included immediate treatment at a well-equipped field hospital, an airlift to the American hospital in Landstuhl, Germany, and ultimately, treatment at his local facility, the University of Alberta Hospital in Edmonton. The cost of the treatment was covered by the military through a third-party health care provider. Salikin has since recovered from a raft of shattered bones and burns, as well as non-paralyzing damage to his spinal cord, but can't yet resume combat duties for the Edmonton-based 3rd Battalion Princess Patricia's Light Infantry. He's still dealing with the effects of having his head smacked on the backseat window. "My short-term memory really sucks. Hopefully I'll get better," Salikin says from his garrison in Edmonton.

It's the sort of personal dilemma now faced by an increasing number of Canadians, with over 200 having suffered serious injury, and 40 killed, while serving in Afghanistan, including 142 wounded and 34 killed this year alone (as of October 30th).

But the ramping up of hostilities has also posed unique professional challenges for medical practitioners, like Maj Sherissa Microys, who are responsible for handling the all-but daily flow of wounded. An anesthesiologist and intensivist, Microys joined the military a year ago, signing up after a 2004 stint as a civilian doctor in Kabul. In May 2006, she was given a 2-month assignment at the hospital in Kandahar, an experience she found incredibly satisfying, although it meant practicing in a facility that could only be called crude by North American standards. Built by the Americans, it's a 1-floor plywood structure approximately 18 by 18 m, with a rotational staff of about 75 doctors and nurses drawn from Canada, the US, Britain, Denmark, Holland, Australia and Romania.



Canapress

Pte Brent Ginther was one of 142 Canadian soldiers wounded in Afghanistan this year as of mid-October.

Microys says the facility is "very well stocked, almost like a level 3 hospital in Canada." It's air conditioned and equipped with a CT scanner, an ultrasound machine, 2 operating rooms, digital imaging and digital radiography capability, a test laboratory, an x-ray department and 6 resuscitation bays. "When I arrived we had a 9-bed all-purpose ward," says Microys. "We upgraded to 22 beds by the time we finished by converting every storage closet and cubby hole into patient room space."

Maj Homer Tien, a trauma surgeon at Sunnybrook Health Sciences Centre in Toronto and a 17-year military vet, who has twice been to Afghanistan (see page 1365), says the hospital has the capability to "provide initial trauma surgery for most traumatic injuries."

Adds Microys: "I could do a double

lumen intubation there." But supplies can be a problem. "We sometimes ran out of antibiotics because shipments can take a long time to get there," she says. "They could be a week late."

"We had a lot of burns when I was there, especially with local soldiers and civilians," says Tien, "and it ate up a lot of our burn resources. But once we identified that need, we immediately ordered a lot more of them."

Because modern body armor and helmets provide considerable protection to the torso and the head, about 80% of the injuries sustained by coalition soldiers are to the extremities, Microys says, adding that Afghan soldiers, who lack the protective equipment, experience far more torso injuries.

The same cannot be said of the inhospitable geography and climate, which undermine all, with little regard to rank or injury. Often, the seemingly banal can pose a threat, like the ever-pervasive sand.

"When there's a sandstorm you can't see a few feet in front of you," says Tien. "In the process of opening the hospital door to go out, the sand blows right in and coats everything." It carries an organism called *Acinetobacter baumannii*, which has proven to have considerable antimicrobial resistance. It's rarely a threat to healthy individuals but can cause pneumonia and bone infections in someone whose immune system is weakened, such as the wounded.

"There's talk of building an antichamber to the hospital, so you'd have a double set of doors, to help keep the sand out," says Tien.

For others, the threat is less physical but just as problematic. Post-traumatic stress disorder (PTSD) and acute stress disorder are among the most common "operational stress injuries," that soldiers face.

"Between 15% to 30% of our soldiers in Afghanistan might experience an emotional stress injury," says Maj Rakesh Jetly, a psychiatrist with 17 years of military service. "It depends on the mission but it's really too soon to say."

In previous Canadian missions, peacekeepers often experienced emotional problems arising from a sense of helplessness, says Jetly: "In the face of absolutely horrific things — I'm seeing through my binoculars a woman being raped, and because of the rules of engagement I can't step in." In Afghanistan, Canadians are actively involved in combat, shooting at the enemy, and being targeted in return, which Jetly says can trigger a different type of emotional response. "How many of us have actually looked at what happens to people who have actually killed others in combat, and seen a colleague killed?"

Jetly, who served a 2-month tour of Afghanistan, runs the armed forces' trauma centre in Halifax, 1 of 5 across the country. He says the military accepts PTSD is a real consequence of war, and that returning personnel are offered extensive counselling services. "This is a treatable illness. There are soldiers who get PTSD and get treatment, including medication, and go back to work [in combat], and we've got data to prove that."

As in Canada, there is a shortage of doctors in Afghanistan. "I'd say we are in a critical need," says recruiter Capt Anne Johnston, a 30-year military veteran. As an incentive, the military is now offering civilian physicians a $225 000 signing bonus if they enlist for 4 years. Once in uniform, they'll receive a competitive salary, working fewer hours each day and seeing few patients, except when posted to a military zone like Afghanistan.

Physician stints in war zones are limited to 2-month tours, which tend to be more appealing than the 6 months faced by soldiers. The docs also receive risk and hardship allowances.

"The military is not a good fit for probably 90% to 95% of medical students and physicians," says Johnston. "However, it is an extremely good fit for 5% to 10% of the people out there."

For those, there also more intangible benefits to be found. There's camaraderie, as Microys notes, as well as shoptalk with doctors from other NATO nations, an opportunity for study and a sense of purpose.

"As a civilian in Canada, I'm in an operating room virtually every single day," she says. "When I want to do research, I have to take a vacation day. In the military, I have the time to do research and get training. ... So many times in Kandahar, when you sit in the lounge at the end of the day, you feel like you're finally practising medicine that's worthwhile. You feel like you've really made a difference." — Paul McLauchlin, Toronto

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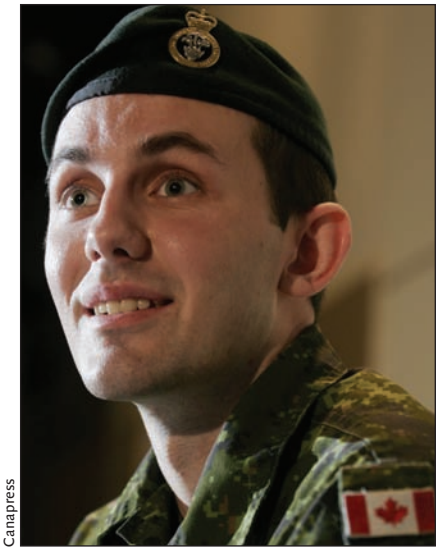

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Pte William Salikin, injured by a suicide bomb attack in Afghanistan, still suffers from his head injury.

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