

Should medicine take over tattoo removal?

B lame it on peer pressure, youthful indiscretion or one tequila too many. Now, 20 years later, you are a briefcase-toting professional with kids, and you have tattoo regrets. You want to rid your biceps of barbed wire, erase the Tasmanian Devil on your shoulder, liberate your calves of Chinese characters you thought meant “courage” but actually mean “evil dog noodle.” Or maybe you still like tattoos but need to free up some skin for new art.

The reasons to de-ink are many but there is really only one solution: laser tattoo removal. But if you choose to remove, you still have a decision to make. Are you going to have a health professional do the job or someone without medical training?

Some physicians believe the procedure should be performed only by doctors or, at very least, in medical facilities under doctor supervision. Owners of tattoo-removal shops, however, say incidents of harm are rare. Medicalizing or over-regulating the procedure will just increase prices, they warn, and will drive more people to experiment with dangerous do-it-yourself options. There is one thing, though, that both sides agree on: there is no shortage of demand in the ink-eradication trade.

Dr. David Zloty, president of the Canadian Dermatology Association, acknowledges that tattoo-removal devices are generally safe and many people who visit nonmedical establishments won't suffer adverse effects. “But when things go bad, they can go quite bad,” he said. “The Canadian Dermatology Association would like to see any laser, light or radio-frequency device be administered by a physician or a physician-designate. It could be a nurse or a technician, someone fully trained in the procedure, with a physician on site.”

Though adverse effects are infrequent, with demand growing and more nonphysician practitioners opening up shop, they can only increase, said Zloty. The industry isn't regulated. Many of the people operating the devices are inadequately trained, said Zloty, and may have received instruction only from laser manufacturers. Similar concerns have been raised in the past about laser



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Laser removal of large, intricate, multicoloured tattoos can take many sessions and cost thousands of dollars.

hair removal, another industry lacking regulation and adequate training.

Problems typically arise from poor setting-selection on the devices, which can result in burns, severe blistering or scarring. The second-degree burns suffered by 18 clients of Bye Bye Tattoo in Quebec — and the thick, red, rope-like scars that followed — prompted the province's college of physicians to form a committee to look into regulating the industry. But there isn't much momentum elsewhere across Canada for regulation, at least not yet.

“It might not happen in the short-term, but I suspect, in the long-term, there may be more pressure,” said Zloty. “It may be a function of the number of clients who start to be harmed by unlicensed practitioners.”

Edwin Miller, owner of Vancouver Tattoo Removal, isn't against some form of regulation, as long as it's reasonable. “I think it's tough to argue that laser tattoo removal needs more regulations than laser hair removal (or other aesthetic laser treatments for that matter) given the similarities of the lasers and the potential dangers that are inherent in them,” Miller wrote in an email.

As it stands, he wrote, British Columbia already requires practitioners to have some training and tattoo-removal businesses undergo regular health inspections. The devices are

approved by Health Canada and his business is fully insured, which he believes should be a requirement for everyone in the industry. According to Miller, customers concerned about safety should read reviews, ask to see certifications and health-inspection reports, inquire about insurance and seek references from past customers.

“People sign a consent form that reviews the risks,” wrote Miller, who also owns Gastown Tattoo Parlour. “If a customer is willing to accept the risks then it should be their choice.”

As for shifting tattoo removal exclusively into the medical sphere, that would be a bad idea, wrote Miller. Tattoo removal is not covered under medicare. The cost of a session at his business starts at \$80, but doctors typically charge two or three times that, according to Miller. (Zloty estimated that going to a nonphysician reduces cost by a third to a half.) Miller also claims to have far more experience with both tattooing and tattoo removal — business has tripled since Vancouver Tattoo Removal opened three years ago — than any medical professional.

“I personally have done more laser tattoo removal sessions (thousands) than most doctors have ever done or will ever do. During this time I have gained a lot of knowledge about removing tattoos. Is my experience discounted because I

don't have a medical degree?" he wrote, noting that he can recall only a handful of times when customers experienced blistering or scarring.

"Some people cannot afford the prices that many doctors would charge and, as a result, try to conduct their own procedures to remove their unwanted tattoos (cutting themselves, sanding their tattoos, applying dangerous chemicals to the skin — I have seen it all). These techniques carry far more risk than using a laser."

Of course, if the many failed attempts to regulate the procedure in Alberta are any indication, perhaps Miller and others

in the industry have little to worry about. Over the past decade, the College of Physicians and Surgeons of Alberta has requested — multiple times, without success — that the government add the use of lasers to the province's list of restricted health activities. If it were on the list, laser tattoo removal could only be performed by a regulated health practitioner.

"You are applying energy to tissue," said Dr. Trevor Theman, the college's registrar. "There is risk of a problem if you don't know what you are doing."

Regulating tattoo removal is difficult, though, said Theman. If only physicians

were doing it, the college could regulate the practice. And the government regards the procedure as cosmetic, so it doesn't fall under the health ministry's purview. Still, the college views tattoo removal as potentially harmful if performed by unskilled practitioners and sees no reason to change its position.

"It should be regulated and there should be some oversight," said Theman. "There should be a mechanism by which members of the public can complain and raise concerns." — Roger Collier, *CMAJ*

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TB: fighting a forgotten disease in Canada

Noah Papatsie was working as a television producer in Iqaluit when a minor mishap changed his life.

"My coworker put a light on and it popped right in front of me," he recalls. "Right there, I lost sight in my right eye."

A local doctor said that incident couldn't cause blindness, and he waited six months to get a second opinion from specialists in Ottawa. Papatsie was shocked to learn he had tuberculosis (TB). The infectious disease usually attacks the lungs but can also affect other organs.

There was no way of knowing how long Papatsie had been contagious. And because Nunavut outsources all TB testing to nearby provinces, it took agonizing weeks for those back home to find out if they too were infected.

Papatsie is now TB-free, but totally blind. If it had been diagnosed earlier, he says, "I would still see today."

Canada has about 1600 new TB cases each year — relatively few compared to other countries, but it's precisely because TB is so rare that we're ill-equipped to quickly diagnose and ultimately to eradicate the disease.

"Someone can be coughing for six weeks and we often don't think of TB," says Dr. Maureen Mayhew, a public health physician at the BC Centre for Disease Control (BCCDC).

Part of the problem is that cases have become concentrated in marginalized populations. About 75% involve immigrants and 20% involve Aborigi-



Courtesy of Noah Papatsie
For Noah Papatsie and other Northerners, tuberculosis is a fact of life.

nal people, typically in the North where overcrowding, high smoking rates and other risk factors prevail.

Both groups present unique challenges and Canada's failure to address those is partly why the decline in TB has slowed in recent years, says Mayhew. That's changing now.

BC is taking aim at latent TB cases. About 5%–10% of these dormant cases will later become active TB, although individual risk is tough to predict. Most immigrants undergo screening for active TB before entering Canada, but that only detects about 4.5% of cases. Others with latent TB go undetected and are difficult to capture for a second screening, because from their perspective they're clear, says Mayhew.

The BCCDC recently released videos in six languages to help health workers explain latent TB to patients. Work is also underway to screen patients at higher risk, including those with HIV.

Aboriginal and Northern communities face different challenges to TB control. In Nunavut, where TB rates rival those in high-incidence countries like Bangladesh, it can take up to a month for test results to arrive from a lab outside the territory.

Potentially infectious patients often return to their communities while they await diagnosis, says Dr. Gonzalo Alvarez, a scientist and staff respirologist at the Ottawa Hospital. In addition, physicians in the south may not readily recognize the disease, says Dr. Madhukar Pai, associate director of the McGill International TB Centre in Montréal.

In March, Nunavut announced \$1.5 million for a slate of new TB initiatives, including an awareness campaign, a community educator, term nurses for areas with new active cases and a laboratory technician to run a new DNA testing unit in Iqaluit.

The Xpert MTB/RIF unit can identify the TB bacteria's genetic code in fewer than two days with 85% accuracy. Operating the WHO-endorsed unit in Iqaluit's hospital cut the average wait for diagnosis by up to 37 days.

"These patients are usually feeling terrible — they have weight loss, night sweats, fever and chronic cough," says Alvarez. "Being able to start treatment the next day instead of next month will make a world of difference." — Lauren Vogel, *CMAJ*

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