

WHO WE ARE

The Eye Physicians and Surgeons of Ontario, a section of the Ontario Medical Association, represents more than 450 of Ontario's ophthalmologists who are dedicated to preserving and restoring the vision of Ontario residents. Ophthalmologists are leaders of the eye care team with more than nine years of medical training. Ophthalmologists specialize in the diagnosis and treatment of eye diseases by providing comprehensive eye exams, prescribing corrective lenses and administering medications. Ophthalmologists are the only professionals that may perform eye surgery or perform injections in or around the eye to help improve vision in patients.

EYE TATTOO OVERVIEW

In 2007, an article in the ophthalmology literature was published describing the first examples of vision loss associated with unregulated episcleral tattooing.¹ In September 2017, a 24-year-old Ottawa woman went to a tattoo artist to get her sclera tattooed. The process performed on the woman involved using a needle to inject an unregulated dye under the bulbar conjunctiva of the eye.¹⁴ The tattoo procedure did not go as planned.^{2,3} She immediately experienced intense pain and she is at risk of suffering long term ocular complications. The Ottawa case went viral around the world as this tattoo artist stated he has done 20 eye tattoos with multiple complications in recent months.⁴



Ophthalmologists around the world are experiencing increasing numbers of patients with blindness and loss of an eye because of the increasing popularity of eyeball tattooing^{5,6}. The risky act of tattooing an eye is being performed by untrained individuals who have no knowledge of the eye's delicate anatomy.

The Eye Physicians and Surgeons of Ontario (EPSO) are looking to the Ontario government to ban the practice of eye tattooing in all communities in Ontario. We would like to see Ontario be the leader in the creation of this legislation in Canada to protect the public's vision and prevent unnecessary cases of blindness. Included in this creation of legislature would also be the exclusion of implanting eye jewellery under the conjunctiva which was initially performed only in the Netherlands but is a growing trend in the USA.^{7,8}



BACKGROUND

Corneal tattooing has been used as a regulated surgical treatment for disfiguring corneal scars or to treat glare due iris trauma. This treatment is performed by an ophthalmologist in a sterile operating room with tested dyes that have been studied in the ophthalmic literature for decades. However, tattoo parlours recent introduction of injecting an unregulated coloured dye at the conjunctival-scleral surface has resulted in chronic ocular inflammation

and migration of the unregulated dyes into the eye causing potential toxicity to the retina. Ocular tattooing by untrained professionals has also resulted in numerous severe ocular complications via needlestick penetration of the sclera (eye wall) causing cataracts, retinal detachments and choroidal hemorrhages of the eye. Many of these eyes have developed untreatable infections (endophthalmitis) that has led to the removal of the eye (enucleation) due to severe pain and potential spread of the infection to the eye socket and brain.

- Other short-term complications reported so far include: headaches, severe photophobia, persistent foreign body sensation, and migration of ink staining.¹
- As mentioned, more serious short-term risks include infection (endophthalmitis), globe penetration, retinal detachment and peri-ocular haemorrhage.¹
- Speculation on the long-term consequences include retinal toxicity or granulomatous ocular inflammation. Unfortunately, the long-term risks of cancer are not known with these unregulated tattoo inks and dyes.¹

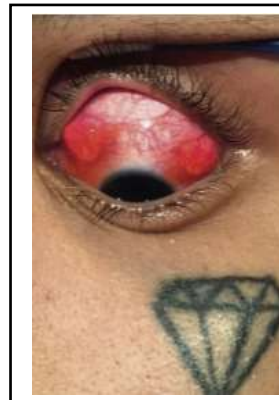
CASES



A 43-year-old man in Britain: chronic conjunctival inflammation in 3 distinct areas of each eye causing severe ocular pain.¹



A 25-year-old woman in Brazil experienced severe ocular pain and decreased vision in the left eye. In addition to having black deposits on various parts of her eye, she experienced severe anterior uveitis and later, secondary glaucoma.⁹



A 17-year-old Mexican man developed two sub-episcleral nodules in the ink injection sites immediately after the procedure.¹²



A 26-year-old Mexican woman developed orbital cellulitis and posterior scleritis within 2 hours of receiving tattoo.¹²

A 24-year-old Alberta man had his eye surgically removed as a result of bacteria contaminated tattoo ink which was injected into the eye. This case was on the American Academy of Ophthalmology website for months with no action taken by the any jurisdiction in Canada.¹¹

A 49-year-old Caucasian man from Australia/New Zealand underwent an eye tattoo and a tattoo artist inadvertently penetrated the globe and tattoo pigment crystals were injected into the vitreous, retina and sub retinal space which resulted in inflammation, retinal toxicity and endophthalmitis. Image shows blue tattoo pigment present in the vitreous and on the retina seen intraoperatively.¹⁰



PRECEDENT

Conjunctival tattooing has only recently been introduced and as such there is no legislation concerning its use in most countries including Canada.

In the US state of Georgia, tattoos are forbidden within an inch of the eye socket except when performed by a physician.¹³

The Royal Australian and New Zealand College of Ophthalmologists is working with the South Wales state government to amend legislation to include a new section that will make it an offence for a person other than a medical practitioner, or other person prescribed by the regulations, to perform eyeball tattooing. Once this is amended they look to obtain the same results in other states and eventually New Zealand.

PARTNERSHIP

The Eye Physician and Surgeons wishes to partner with the Ontario government to ban the practice of eye tattoos to prevent blindness and increase eye safety in our communities. We also wish to decrease the burden on the health care system by banning this unsafe practice as these patients will require services from ophthalmologists, ocular prosthesis services, and mental health supports to deal with blindness in a young person.

We also wish to prevent future cases of individuals that may need ODSP and social services for long periods of time due permanent disability associated with long term vision loss and chronic pain. Ocular and periocular injections should only be performed by a licensed medical physician due to the high risks associated with blindness and infections of the eye.

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