

September 2018

JOINT POSITION PAPER CALLING FOR A COMPLETE BAN OF SCLERAL TATTOOING AND EYEBALL JEWELRY IMPLANTATION IN MANITOBA

CONTEXT

There is a growing trend among body modification enthusiasts to tattoo their eyeballs (specifically the sclera of the eye) and also implant jewellery under the surface layer (conjunctiva) of the eyeball. This is being done unsafely by untrained artists under questionable conditions and leading to a variety of unfortunate complications, including loss of vision and loss of the eye in some cases.

As eye health care professionals, the **Manitoba Association of Optometrists (MAO)** and the **Eye Physicians and Surgeons of Manitoba (EPSOM)** are submitting this joint statement calling for a ban of these dangerous practices leading to unnecessary morbidity and loss of vision in members of the unsuspecting public.^{1 2}

RECOMMENDATION

The Manitoba Association of Optometrists (MAO) and the Eye Physicians and Surgeons of Manitoba (EPSOM) strongly recommend that the practice of eye tattooing and implantation of eye jewelry be banned throughout Manitoba in order to protect the public's vision and prevent unnecessary cases of blindness and long-term morbidity.

It is our opinion that ocular and peri-ocular injections should only be performed by a licensed medical physician due to the high risks associated with blindness and infections of the eye.

BACKGROUND

Eyeball/Scleral Tattoos



Scleral tattooing is a relatively new practice. It was first described in 2007. Since then, the devastating risks and complications of this unsafe procedure have been reported in ophthalmology literature.³

The process of scleral tattooing typically involves injecting dye between the conjunctiva and the scleral layers of the eye. The thickness of these two layers combined is less than 1 mm, making it a very challenging and risky procedure.

Implantation of Eye Jewelry



Another similar process occurs for the implantation of eye jewelry. An incision is made in the conjunctiva overlying the sclera. A small flat platinum shape is inserted between these two layers. This procedure was initially performed in the Netherlands and is a growing trend in the United States.^{4 5}

Eye Health Challenges

Ophthalmologists and optometrists around the world are seeing increasing cases of patients with complications due to eyeball tattooing including blindness and eye loss^{6 7}. The risky act of tattooing an eye is being performed by untrained individuals who have no knowledge of the eye's delicate anatomy.

Complications from scleral tattooing include chronic ocular inflammation and migration of the unregulated dyes into the eye causing potential toxicity to the retina.

Inadvertent penetration of the eye with the dye-containing needle can cause sight-threatening complications such as cataracts, retinal detachments and choroidal hemorrhages of the eye, and glaucoma^{8 9}. Many of these eyes develop untreatable

infections inside the eye (endophthalmitis) and severe eye inflammation¹⁰. In some cases, this has led to the removal of the eye (enucleation) due to extreme pain and potential spread of the infection to the eye socket and brain¹.

Less severe short-term complications include headaches, severe light sensitivity, persistent foreign body sensation and migration of ink staining to surrounding tissues. It is unclear whether there are long-term risks of retinal toxicity, granulomatous ocular inflammation, or cancer associated with these unregulated tattoo inks and dyes.³

Precedent

Ontario has recently passed a ban on scleral tattoos and the implantation of eye jewelry (given the similarities in procedure and risk). Ontario is now the only jurisdiction in Canada with such protections in place.

Other jurisdictions are taking action as well. In Australia in September 2018, the New South Wales state government amended their Public Health Act to ban scleral tattooing unless performed by a qualified health professional¹¹. The same changes were made to the New Zealand Public Health Act in November 2018¹².

The US states of Georgia (1990)¹³ and Oklahoma (2009) have pre-existing legislation to protect against this type of activity. Bills were also introduced in Illinois (2010 scleral tattoo; 2005 ban on eye implants). The state of Indiana recently outlawed scleral tattooing as of July 1, 2018.

APPENDICES

Acknowledgement

We would like to thank the Eye Physicians and Surgeons of Ontario (EPSO) for allowing us to use some of their documentation on this issue for our position paper.

Sample Case Reports

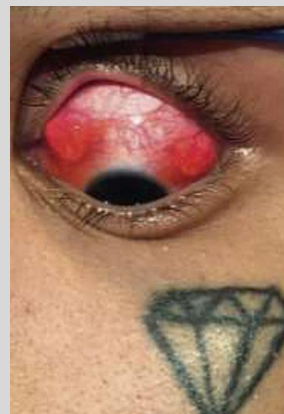


A 43-year-old man in Britain: chronic conjunctival inflammation in three distinct areas of each eye causing severe ocular pain.³

A 25-year-old woman from Brazil experienced severe ocular pain and decreased vision in her left eye. In addition to having black deposits on various parts of her eye, she experienced severe anterior uveitis and later, secondary glaucoma.⁸



A 26-year-old Mexican woman developed orbital cellulitis and posterior scleritis within two hours of receiving the tattoo.¹⁰



A 17-year-old Mexican man developed two sub-episcleral nodules in the ink injection sites immediately after the procedure.¹⁰

Notable Canadian Cases

There have been two significant cases of complications from scleral tattooing in Canada recently.



In July 2017, a **24-year-old Alberta man** had to have his eye surgically removed as a result of complications stemming from improper injection technique and bacterial contamination from a scleral tattoo procedure¹.

In September 2017, a **24-year-old Ottawa woman** got a scleral tattoo by a local artist. She immediately experienced intense pain and is now at risk of suffering long-term ocular complications.^{14 15} The Ottawa case went viral receiving global attention. This tattoo artist claimed that he had done 20 such eye tattoos with multiple complications in recent months.¹⁶



References

- ¹ Gudget D. Getting an Eye Tattoo Can Blind You. Sigmund Eye Care. July 7,2017. <http://siegmundeyecare.com/eyeball-tattoos-even-worse-sound/>
- ² Thomson Reuters. Tattoo Safety questions remain long term. CBC News. August 6, 2015. <http://www.cbc.ca/news/health/tattoo-safety-questions-remain-in-long-term-1.3181974>
- ³ Brodie J, El Galhud H, Bates A. A case of episcleral tattooing-an emerging body modification trend. BMC Ophthalmol.2015;15:95.
- ⁴ Dede, Steve. New procedure by Dutch hospital implants jewellery in people's eyes. Pulse.ng February 25, 2015. <http://www.pulse.ng/gist/in-netherlands-new-procedure-by-dutch-hospital-implants-jewellery-in-people-s-eyes-id3519224.html>
- ⁵ Lupkin, Sydney. Surgically Implanted Eyeball Jewelry is the New Piercing. ABC News. November 26, 2013. <http://abcnews.go.com/Health/eyeball-jewelry-piercing/story?id=21009263>
- ⁶ Goel I. Delhi man is first to get eyeballs tattooed but be careful if you want one too. The Indian Express. October 9, 2017. <http://indianexpress.com/article/lifestyle/health/delhi-man-karan-gets-eyeballs-tattoo-here-is-why-you-should-be-careful-risks-4870673/>
- ⁷ Osborne S. Forked tongues and tattooed eyeballs: should body modification be regulated? The Guardian. October 10, 2017. <https://www.theguardian.com/fashion/shortcuts/2017/oct/10/forked-tongues-tattooed-eyeballs-extreme-body-modification>
- ⁸ Cruz NF, Santos KS, Farah ML, Felberg S. Conjunctival Tattoo with Inadvertent Globe Penetration and Associated Complications. Cornea. 2017; 36(5):625-627.
- ⁹ Jalil A, Ivanova T, Bonshek R, et al. Unique case of eyeball tattooing leading to ocular penetration and intraocular tattoo pigment deposition. Clin Exp Ophthalmol. 2015; 43:594-596
- ¹⁰ Duarte G, Cheja R, Pachon D, Ramirez, Arellanes L. Case Series: Two cases of eyeball tattoos with short-term complications. American Journal of Ophthalmology Case Reports 2017; 5: 26-28
- ¹¹ New South Wales Public Health Act 2010 No 127, Section 39A. Available at <https://www.legislation.nsw.gov.au/#/view/act/2010/127/part3/div4/sec39a>
- ¹² Statement of Proposal to amend Auckland Council Health and Hygiene Bylaw 2013 for public consultation, August 2018 Available at <https://www.aucklandcouncil.govt.nz/have-your-say/topics-you-can-have-your-say-on/proposed-changes-health-hygiene-bylaw/Pages/consultation-documents.aspx#panelLinks>
- ¹³ Georgia Code. Tattooing. 2010. Available at <https://law.justia.com/codes/georgia/2010/title-16/chapter-12/article-1/16-12-5>
- ¹⁴ Mulholland, Angela. Canadian woman warns others after botched eye tattoo. CTV News September 28, 2017. <http://www.ctvnews.ca/health/canadian-woman-warns-others-after-botched-eye-tattoo-1.3610603>
- ¹⁵ Racco, Marilisa. This Ottawa woman got an eyeball tattoo and now she could lose her eye. Global News September 28, 2017 <https://globalnews.ca/news/3774736/eye-tattoo-botched-ottawa/>
- ¹⁶ Von Scheel E. Artist defends eyeball tattoo that left Ottawa woman with partial vision loss. CBC News. September 30,2017. <http://www.cbc.ca/news/canada/ottawa/tattoo-artist-eye-blindness-1.4313799>