

The case was managed on a multidisciplinary basis with the ear, nose, and throat surgeons. This was followed by removal of the displaced implant through an endonasal approach with washout of the maxillary sinus. The implant was sent for culture, which grew *Staphylococcus aureus*. At 3 months postoperatively, the patient was noted to have complete resolution of symptoms with healed fistula.

Comment

Orbital floor fractures are a common result of orbital injury. Recognized sequelae of orbital floor fractures include enophthalmos, diplopia from extraocular muscle dysfunction (entrapment, ischameia, haemorrhage, or nerve injury), and infraorbital nerve anaesthesia.³

A wide variety of materials including autogenous grafts and alloplastic implants (Silicone/Silastic/Supramid/Medpor) (Stryker UK Ltd, Newbury, UK) are used for orbital floor fractures. Displacement of the implant into the maxillary sinus is a rare complication and it occurred 25 years after the original procedure leading to persistent infection. While facial cellulitis is a condition that commonly presents itself to the eye casualty, it is important to be vigilant of potentially rare underlying causes of the infection and to take a careful ophthalmic and general medical history.

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MAR Awan^{1,2}, CMG Cheung^{1,2}, S Sandramouli^{1,2} and J Mathews^{1,2}

¹Wolverhampton Eye Infirmary,
Wolverhampton, UK

²Department of Ear, Nose and Throat,
New Cross Hospital, Wolverhampton, UK

Correspondence: S Sandramouli,
Wolverhampton Eye Infirmary, Compton Road,
Wolverhampton WV3 9QR, UK
Tel: +44 1902 752953;
Fax: +44 1902 645018.
E-mail: samouli@aol.com

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Sir,
Nanophthalmology: new frontier in fighting blindness?

Nanophthalmology, an offshoot of nanotechnology, refers to highly specific ophthalmic intervention at the molecular scale. A nanometer is one-billionth of a meter, and it is at this size scale biological molecules and structures inside ocular cells operate. One near-term focus of nanophthalmology is drug delivery. FDA approval for nanophthalmology products has already been achieved. BioSante has developed a calcium phosphate-based nanoparticle platform for treatment of glaucoma. NUCRYST is marketing Silcryst, a burn and wound dressing based on nanocrystalline silver.¹

The nanoparticles are found to be suitable as coating for living cells or artificial retinal implants to prevent immune response.² A silicon chip retinal implant developed by Second Sight make use of ultrananocrystalline diamond film that is reported to be safe, long-lasting, electrically insulating, and extremely tough.³ Further, an NIH funded center is designing a class of nanodevices for generating electric power—nanobiobatteries—for an implantable artificial retina.⁴

With their onboard sensors, nanoscale materials and devices known as nanorobots will react to the same molecular signals that the immune system does, but with greater discrimination.⁵ When an invading harmful virus or bacteria is identified, it can be punctured, letting its contents spill out and ending its effectiveness. If the contents were known to be hazardous by themselves, then the nanorobots could hold on to it long enough to dismantle it completely.⁶ As the technology becomes more sophisticated, new types of ‘nanosurgery’ will be ultimately developed.⁷

Challenges

Manufacturing standards and quality control measures for nanomaterials are yet to evolve. Nanophthalmology also faces negative public perceptions about the possible toxic effects of nanoparticles.^{8,9} Nanoparticles and technology still need to be proven safe towards human health and also to the environment.

To conclude, we are on the verge of a revolution in eyecare. Advances in computational capabilities, developments in nanodevices and remote

communications should be integrated allowing for the success of nanophthalmology. This also involves proving the value of emerging technologies to concerned people, promoting use of technology and sorting out the barriers.¹⁰ This process will bring new horizons to the understanding and practice of ophthalmology.

Competing interests

The author has no competing interests in any of the devices or methodology mentioned in the manuscript.

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S Kumar

Centre of Excellence in e-Medicine, Lions Eye Institute, The University of Western Australia, Perth, WA, Australia

Correspondence: S Kumar,
Lions Eye Institute,
Centre of Excellence in e-Medicine,
University of Western Australia,

2 Verdun Street, Nedlands, Perth,
Western Australia 6009WA, Australia
Tel: +61 8 9381 0760;
Fax: +61 8 9381 0700.
E-mail: sajeesh@cyllene.uwa.edu.au

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Sir,
Transmuscular migration of 240 silicone encircling band

The migration of an encircling band through the extraocular muscles is an extremely rare complication of retinal detachment surgery, which may give rise to ocular motility disturbances and trophic changes at the cornea-scleral junction. This report describes the cheese wiring of a 240 silicone encircling band through the superior and the lateral rectus muscles of a highly myopic eye over a period of seven years. Removal of the exoplant in local anaesthesia alleviated the visual symptoms with no surgical complications.

Case report

A 44-year-old gentleman was admitted with an inferior rhegmatogenous retinal detachment in his left myopic eye (−10 D). A silicone 240 band (Labtician, Oakville, Ontario, Canada) was placed under the four rectus muscles and fixed with a braided non-resorbable suture in all four quadrants. In addition, cryocoagulation, external drainage, and injection of 0.5 ml of air through the pars plana was performed. At 5 months after successful reattachment, the patient presented with a new retinal break and detachment at 7 o'clock anterior to the encircling band. The 240 silicone band was replaced anteriorly and cryocoagulation of the new retinal break was applied. During the next 4 months, the retina remained attached, and the patient was lost to follow-up afterwards. After 7 years, he presented again with a foreign body sensation in his operated eye. This was associated with vertical diplopia, which the patient had noticed for about 1 year before seeking advice. Clinical examination showed a visual acuity of 1.0 OS and the 240 encircling band in the subconjunctival space at the level of the limbus (Figure 1a and b). Ophthalmoscopy showed a completely attached retina. Intermittent hypotropia of the left eye with vertical diplopia was revealed using the Hess–Weiss test. The encircling band was surgically removed in local anaesthesia without incident and no local irritation was present 1 month