Unmentioned risks include potential teratogenicity (has been associated with encephalocoele formation in animal models) and carcinogenicity (lymphoma in the rat model); both models, however, used subcutaneous injections of TB. Similarly, ocular abnormalities have been described in the pregnant murine model.[3] As a cautionary measure, the risk benefit ratio should be properly assessed before proceeding with TB-assisted ophthalmic surgery in pregnant or nursing women.

Conflict of interest
The authors declare no conflict of interest.

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Sir,

Complications due to bovine pericardium used to cover acrylic implants after enucleation and tubes of aqueous devices

Bovine pericardium has been described for wrapping of hydroxyapatite implants[1–5] and Ahmed devices. Owing to a shortage of human scleral graft (HSG), we decided to switch to tutopatch for coverage of acrylic implants after enucleation and aqueous devices. Here, we report four patients that were operated on at Leiden University Medical Centre (December 2010–March 2011) with complications supposedly related to the use of tutopatch.

Case report

Two patients (49 and 54 years) with large choroidal melanoma and one patient (17 years) with CMV retinitis with leukemia were enucleated under general anesthesia, followed by insertion of an acrylic implant wrapped in bovine pericardium (tutopatch, Tutogen Medical GmbH, Neunkirchen am Brand, Germany) that was rinsed in saline for 3 min. After two days, the first two patients presented with excessive chemosis in and around the socket. MRI showed orbital cellulitis and *Staphylococcus aureus* (different strains) were cultured. Unused tutopatch was cultured and showed no bacterial growth. After treatment with systemic antibiotics improvement was observed. After 1–3 weeks, the second and third patient developed extrusion of the implant with liquefied pericardium seeping from the wound. Wound dehiscence debridement was performed and a secondary implant was placed covered with HSG. The postoperative result was cosmetically acceptable.

The fourth patient (9 years) with secondary glaucoma due to uveitis received an Ahmed implant with pericardium covering the silicone tube. Four months after surgery the pericardium had reabsorbed leaving the tube uncovered. The tube was covered with HSG.

Comment

Since December 2010, we have experienced an unusual amount of postoperative problems after switching from HSG to tutopatch. Excessive chemosis with and without extrusion as well as rapid resorption was observed. Gupta[2] and Gayre[1,4] found promising results and recommended bovine pericardium for wrapping of hydroxyapatite implants. A significantly higher incidence of exposure and inflammation in the early postoperative period using bovine pericardium have been reported.[3,5] The underlying mechanism responsible for wound dehiscence is unclear, possibly caused by an inflammatory response.[5] These serious complications need to be reported to alert other surgeons. The use of bovine pericardium to cover orbital implants should be handled with greatest caution until the exact cause of these postoperative complications has been clarified.

Conflict of interest
The authors declare no conflict of interest.

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