‘Tarantula Keratitis’’ a case report

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ORIGINAL ARTICLE

Abstract

Introduction
A case of an 11-year-old boy presenting with a two-week history of a red, irritated right eye after handling a Chilean Rose Tarantula at an exotic pet exhi- bition. Examination revealed innumerable microscopic hairs embedded at all levels of the cornea. He was com- menced on steroid drops with subjective and objective improvement at follow up.

Discussion
Tarantulas use their urticating abdominal hairs as a defense mechanism by flicking them into attackers’ eyes and skin, causing intense irritation. Ocular complications ranging from simple conjunctivitis, through to keratouveitis and even pan-uveitis with chorioretinitis, have been described in the literature. As exotic pets become more popular, the importance of wearing ocular protection when handling tarantulas should be stressed.

Keywords Tarantula hair □ Keratitis □ Painful red eye □ Ophthalmia nodosa

Case

An 11-year-old boy with no prior ophthalmic or medical history was referred to the Accident and Emergency Department at the Royal Victoria Eye and Ear Hospital with a two-week history of red, watery, irritated right eye. He had been placed on a week of antibiotic drops, with no clinical improvement, but did experience some relief from oral antihistamines.

On examination, his vision was 6/7.5 on the right and 6/6 on the left. His right lids were slightly swollen and erythematous. Slit-lamp exam revealed injected conjunctiva and innumerable microscopic barbed hairs embedded at all levels of the cornea, with some breaching Descemet’s membrane (Figs. 1, 2). The anterior chamber was deep and quiet with normal intraocular pressure and normal fundo- scopic exam.

On further questioning, the patient revealed he had visited an exotic pet fair 2 weeks previously, where he had handled a tarantula. In defense, the tarantula had kicked hairs from its abdomen into the right eye of the child and it was after this that his symptoms evolved.

Attempts to remove the hairs proved futile as they were too small, and the patient was started on a course of topical steroid drops, tapering over 4 weeks, with subsequent resolution of symptoms and signs, and no loss of visual acuity.

Discussion

Tarantulas use their urticating abdominal hairs as a defense mechanism by flicking them into attackers’ eyes and skin causing intense irritation [1]. Ocular complications ranging from simple conjunctivitis, through to keratouveitis and even pan-uveitis with chorioretinitis, have been described in the literature [2–5].

Tarantula hairs are typically 0.1–0.3 mm long with a sharp-pointed head and numerous barbs (Fig. 3). They are usually located on the abdomen and may be flicked into the attackers’ eyes or skin in defense [6]. They are capable of penetrating to the dermal layer of skin and beyond Desc-emet’s membrane.

Symptoms are secondary to a hypersensitivity response, and, as the hairs are almost impossible to remove, topical steroids are the effective mainstay of treatment [7]. Phys- ical removal of hairs from the cornea can prove almost impossible, as in this case. Deeper hairs may actually be absorbed without complication, and their removal, there- fore, is not always necessary [8].

Long-term visual loss is rare in cases of eye injury secondary to tarantula hairs, and is associated with pan-uveitis, which in one report was also associated with raised intraocular pressure [5].

As exotic pets become more popular, the importance of wearing ocular protection when handling tarantulas should be stressed. This case also highlights the importance of patients attending an eye clinic if a red eye does not respond to topical antibiotics after 48 h.

Conflict of interest None.

Fig. 1 Tarantula hairs deeply embedded in cornea

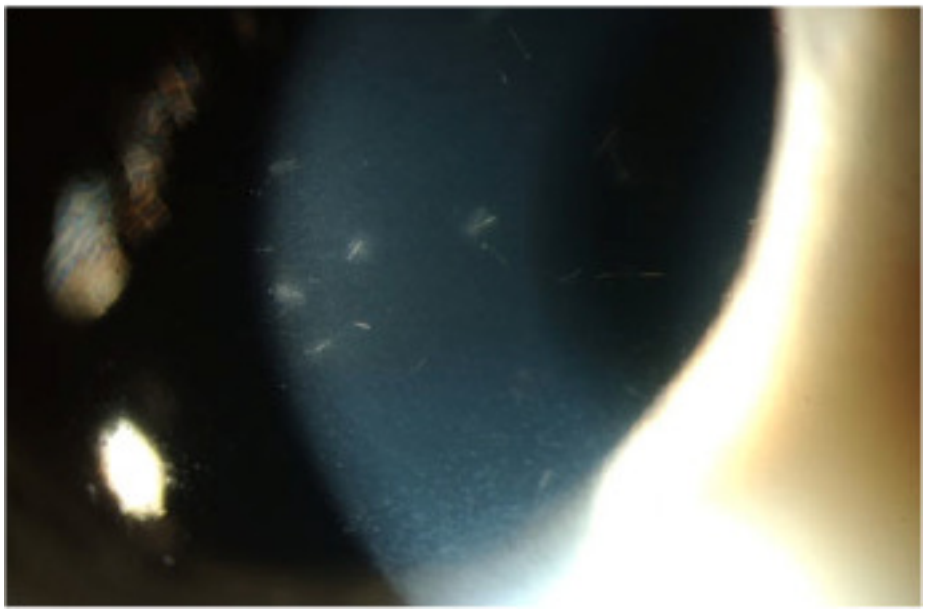


Fig. 2 Tarantula hairs scattered across cornea

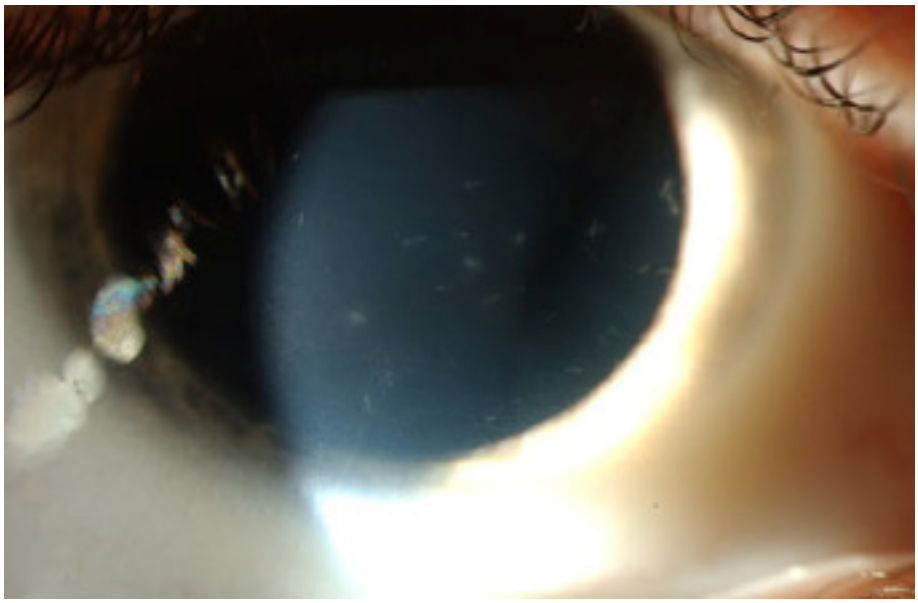
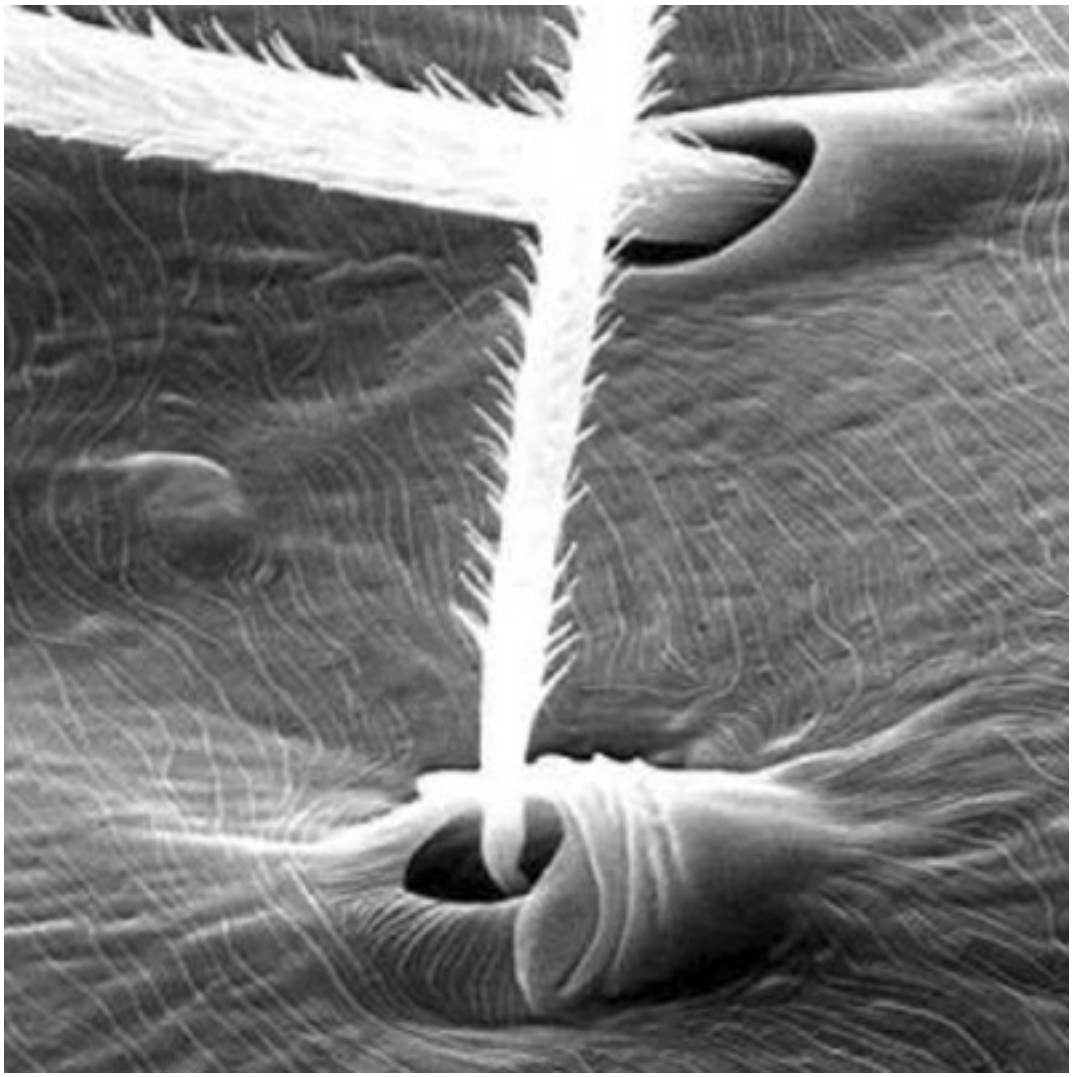


Fig. 3 Microscopic view of tarantula hairs



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