

have been shown to penetrate into the dermal layer of human skin and through Descemet's membrane.⁹ Eye rubbing facilitates this process further.

They are described as immediate skin urticaria, chronic kerato-conjunctivitis,^{2,4,6} intracorneal hairs^{4,10} with corneal granuloma, chronic iritis,^{2,4,6,10} vitritis ± cystoid macular oedema, papillitis³ and punctate chorioretinitis.⁸ Secondary glaucoma and cataract have also been reported.⁸ The chorioretinal lesion is believed to represent the reaction due to intraocular migration of hairs through ocular tissues. The management includes removal of the offending hairs, which is often not possible in most cases. The use of topical steroids without antibiotics has proved to be an effective regimen. Therefore, it is reasonable to assume that it is a hypersensitivity reaction to tarantula hairs rather than an infective element.

Keeping tarantulas is one of the fastest growing pet hobbies and advertised as harmless and 'a true nature's jewellery' to have. Often, they are bought for children as a gift, unaware of its potential risk. Ophthalmia nodosa due to tarantula hairs is rare but potentially devastating. Very young children are seen frequently handling them, without any protection (eg www.freewebz.com/billyspets/). Tarantula pet owners and young owners' parents should be forewarned on the potential ocular dangers associated with handling these spiders. Protective gloving and goggles are essential. It is only by raising awareness in this issue that further cases can be prevented.

Acknowledgement

The authors have no proprietary interest in any aspect of this study.

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Sir,

A case of orbital myositis secondary to orbital cellulitis in a child

Eye (2003) **17**, 434–436. doi:10.1038/sj.eye.6700342

Orbital myositis can be defined as a nonspecific localised orbital inflammatory process in which one or more of the extraocular muscles may be involved.¹ Clinically, it is characterised by acute pain exacerbated by eye movement.² Other symptoms such as ptosis,³ proptosis and peribulbar swelling⁴ can also occur. Globe retraction on attempted eye movement away from the direction of the action of the involved muscle is a characteristic sign.¹ Treatment with systemic steroids causes rapid resolution.^{2,5}

Case report

A 6-year-old Caucasian boy was seen in the eye casualty complaining of a 2-day history of left-sided pain, photophobia and peri-orbital swelling. This was preceded by a fever a few days previously. There was no other ophthalmic history of note. He had no history of head injury, but there was a history of sinusitis. He was on no medication and had no known allergies. There was

a family history of flu-like illness affecting all the members of the family in the preceding weeks. On examination, he was afebrile. His visual acuity was 6/6 in each eye. Colour vision using the Ishihara colour plates was normal. There was mild oedema of the left upper lid and left lower lid, but no evidence of erythema. A partial left-sided ptosis was present that covered the left pupil. Levator function on that side was poor.³ Clinically, a mild left-sided proptosis was also present. Cover test revealed a small divergent squint and left hypertropia present for near and distant. On lifting the ptotic left lid, the patient complained of horizontal and vertical diplopia in primary position. Ocular motility examination revealed limitation of the left eye on dextroversion, elevation and depression, and all ocular movements of the left eye were very painful. Anterior segment examination was satisfactory. There was no relative afferent pupillary defect (RAPD). Dilated funduscopy was normal and, in particular, there was no evidence of disc swelling.

B-scan showed increased orbital fat density and volume around the superotemporal orbital rim. There was also a suggestion of hypertrophy of the superior and lateral recta. There was no evidence of thickened sclera and sub-tenon's space was normal.

ENT review suggested a high probability of orbital cellulitis secondary to sinusitis. The patient was admitted and treated with intravenous antibiotics.

A CT scan performed revealed evidence of sinus disease. The muscle bellies as well as the tendons of the medial and inferior recta were diffusely thickened. This suggested orbital myositis rather than thyroid eye disease. No evidence of sub-periosteal abscess or collection could be found and the cavernous sinuses were clear.

Results of FBC and U&E and blood film were normal. Coagulase negative staphylococcus was isolated from the blood cultures. It was never ascertained if these were contaminants.

Even 48 h after admission and treatment with IV antibiotics, the patient was still complaining of diplopia and the ptosis was still present. He was started on prednisolone 10 mg OD and continued on the IV antibiotics for a further day before changing to oral treatment. The next day, the swelling of the eyelids, the ptosis and diplopia had improved significantly. A week later all symptoms had settled fully. Examination including orthoptic assessment was satisfactory.

Comments

Orbital myositis has been described secondary to orbital cellulitis. We felt this case was one such classic case. The

rapid response of signs and symptoms to low-dose oral steroids was typical of orbital myositis.

Orbital myositis has been associated with a variety of other systemic problems in adults and children. In children there has been a report of orbital myositis associated with the Lyme disease⁶ and Crohn's disease.⁷ In adults, the associations are with raised thyroid antibodies,⁸ herpes zoster infection,⁹ as a paraneoplastic syndrome in non-Hodgkin's lymphoma,¹⁰ metastasis from a small cell carcinoma,¹¹ giant cell myocarditis,¹² cysticercosis,¹³ systemic lupus erythematosus and autoimmune disorders.¹⁴ Opinions vary as to which patients presenting with orbital myositis should be investigated for associated systematic diseases.^{2,8}

In summary, this was a case of a 6-year-old Caucasian boy who presented with classic signs and symptoms of orbital cellulitis. Despite appropriate treatment, however, he was left with residual ipsilateral ptosis and diplopia. These resolved rapidly after administration of low-dose oral steroids.

Acknowledgement

Conflicts of interests: None.

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Sir,

Associations of high hypermetropia in childhood
Eye (2003) **17**, 436–437. doi:10.1038/sj.eye.6700329

Further to our findings on high myopia in childhood,¹ we reviewed 114 consecutive children under 10 years of age with high hypermetropia (greater than +5.00 dioptres) during a 5-year period and found both analogous and contrasting results (Table 1).

Whereas the myopic children were referred for the most part with nonspecific symptoms, 68% of the hypermetropic children were referred because of specific signs (strabismus 57%, hypermetropia 11%). Furthermore, the finding that initiated referral was confirmed in all but one case. Demographically the children were similar to the myopia group in terms of age at presentation and gender, but there was no over-representation of Asian children in the hypermetropia series.

In both series, the incidence of simple high refractive error was low (hyperopia 12%, myopia 8%). An orthoptic abnormality was present in 80% of the children with hypermetropia, usually accommodative esotropia (54%).

The spectrum of ocular associations was much narrower in the hypermetropic than the myopic group, but the overall incidence of ocular abnormality was almost identical (13% compared to 16%) (Table 2).

Table 1 Incidence of systemic, orthoptic and ocular abnormalities in children with high hypermetropia compared to high myopia¹

Abnormalities	Hypermetropia (%)	Myopia ¹ (%)
Simple refractive error alone	12	8
Orthoptic abnormalities		
Strabismus	62	8
Nystagmus	4	17
Amblyopia	24	32
Systemic conditions	21	53
Ocular abnormalities	13	16

Table 2 Incidence of ocular abnormalities found in children with high hypermetropia

Ocular abnormality	Number (%)
Lens subluxation	5 (4)
Glaucoma	2 (2)
Cataract	2 (2)
Limbic dermoid	1 (1)
Axenveld–Reiger syndrome	1 (1)
Coloboma	1 (1)
Microphthalmia	1 (1)
Peter anomaly	1 (1)
Orbital fibrosis syndrome	1 (1)

Table 3 Incidence of systemic conditions affecting children found to have high hypermetropia

Systemic abnormality	Number (%)
Global developmental delay	4 (3.5)
Chromosomal abnormalities (trisomy 21; Reiger syndrome; trisomy 8; chromosome 18 deletion)	4 (3.5)
Neurological abnormalities (hydrocephalus+ epilepsy; microcephaly+ neuroblastoma; craniopharyngioma)	3 (3)
Marfan's syndrome	3 (3)
Cleft palate/hare lip/Goldenhar syndrome	3 (3)
Previous extreme prematurity	2 (2)
Craniosynostosis	2 (2)
Congenital cardiac abnormalities	2 (2)
Miscellaneous (Goltz syndrome; oculocutaneous albinism; Maden Walker syndrome; immune deficiency; soft tissue syndactily)	5 (4.5)

In total, 24 (21%) of the children with hypermetropia had a systemic association compared to 53% of the myopic children. In only one case of high hypermetropia was the systemic diagnosis made following recognition of the refractive error (Table 3).

In conclusion, children with high hypermetropia are more likely to present with, and be referred for, definite