

self-inflicted eye injuries suffered from some kind of psychotic disorder. One-third also showed some other type of self-injurious behaviour.<sup>2</sup>

Self-inflicted scleritis is unusual,<sup>3</sup> but our case had several clues to its factitious nature that had been documented in other reports. Only the inferior sclerae were involved and on more than one occasion excoriation of the skin of the lids and malar regions was noted,<sup>4</sup> suggesting instillation of some toxic substance. The sites of maximal involvement and the unexplained corneal and conjunctival defects were typical of factitious eye disease.<sup>3,5</sup> Compliance was questionable, as she never showed Cushingoid features despite a prolonged prescription of high doses of oral corticosteroids. The suspected pharmacological anisocoria and unexplained visual loss also aided in making the diagnosis.<sup>1,3</sup> Recent death in the family has also been shown to be associated.<sup>5</sup>

A prompt, correct diagnosis would have saved time, the expense of investigations, and the administration of unnecessary, potentially toxic medications. Psychiatric evaluation is strongly recommended to identify and address underlying psychiatric problems.

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Sir,

## Sanichlor-induced atopic dermatitis and asthma in ophthalmologists

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We report cases of atopic dermatitis and severe asthma following chronic exposure to Sanichlor (sodium dichloroisocyanurate), which was being used for disinfection of tonometer heads. This is the first such report in the literature.

## Case report

Sanichlor was introduced as a disinfectant for tonometer heads at the Southampton eye unit in September 1994. A 1:1000 dilute solution was prepared from each Sanichlor tablet in a lay-up area of the minor operations room and then distributed to eye casualty, outpatient cubicles and the ward. After a few days, a male ophthalmologist reported fingertip changes as well as breathing difficulties, while a female colleague developed fingertip changes and increasingly severe generalised urticaria followed by angioedema of lips. Both ophthalmologists reported improvement in their symptoms by avoiding contact with Sanichlor. Seven years later the female ophthalmologist noticed increasing breathing problems, coinciding with her work in the minor operations room. She kept a diary of these events and found that her breathing difficulty was worsened on days she had been working in the minor operations room and began to remit at weekends and holidays. She was diagnosed in March 2001 to have late-onset asthma. Nocturnal dyspnoea became a major problem despite the use of long-acting bronchodilators, high-dose inhaled steroids and frequent relieving doses of short-acting bronchodilators. During this period, her general health had deteriorated to the point that she was contemplating discontinuing her work in the eye unit. Another female ophthalmologist who joined the unit in 1996 also reported the development of severe fingertip dermatitis. Skin patch testing done at Occupational Health was unhelpful, but she discovered that avoidance of Sanichlor solution helped her skin problem. After consultations with the Occupational Health Department, a decision to change the disinfectant for sterilising tonometer heads was taken in August 2001. Hydrogen peroxide 3% was chosen as a suitable alternative disinfectant<sup>1</sup> for sterilising tonometer heads throughout the eye unit and allied peripheral clinics. Since then the first female ophthalmologist has had a significant improvement in her general health, but remains dependent on antihistamines, bronchodilators and inhaled steroids.

## Comment

Sanichlor in a 1:1000 dilution solution is a convenient method of preparing a chlorinated solution for disinfection. It is a known respiratory, skin and ocular irritant, which is featured in the list of hazardous chemicals by the International Labour Organization.<sup>2</sup> Bronchial hyperresponsiveness and asthma has been reported<sup>3-7</sup> with chlorine gas inhalation and chloramine T, an organic disinfectant. Chloramines are formed when chlorine combines with organic matter in tissues. Chloramines have also been reported<sup>8-10</sup> to cause allergic contact urticaria. The above-reported asthma and contact dermatitis in our ophthalmologists can be ascribed to exposure to chlorine and its derivatives like chloramines, the actual mechanism possibly being a combination of mucosal irritation and sensitisation towards these substances. These cases illustrate the potential for severe adverse effects with Sanichlor, which is still in use as a disinfectant for tonometer heads in some eye units in the UK. Hydrogen peroxide 3% appears to be a safe and acceptable alternative, while awaiting a reliable and user-friendly form of disposable tonometer heads for use in ophthalmology.

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Sir,

### Central retinal artery occlusion following staphylococcal orbital cellulitis

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Visual loss following orbital cellulitis can still occur despite prompt diagnosis and management. The development of retinal and/or ciliary artery occlusion following orbital cellulitis has not been well documented.<sup>1-3</sup> We report a case of rapidly progressive staphylococcal orbital cellulitis resulting in a central retinal artery occlusion.

### Case report

A 51-year-old Indian male presented to the eye department with a 24-h history of progressive left periorbital pain and swelling accompanied by fever and chills. His right visual acuity was 6/4 and left visual acuity was hand movements. Examination of the left eye revealed a pustular lesion at the inner aspect of the upper lid with periorbital swelling, complete ptosis, marked proptosis and haemorrhagic chemosis (Figure 1a). Anterior segment examination demonstrated corneal oedema (Figure 1b). Fundus examination showed patchy filling of the tributaries of the central retinal artery and vein, superficial retinal opacification at the posterior pole and the absence of a cherry red spot at the macula (Figure 1c).

Intravenous acetazolamide, ocular massage and anterior chamber paracentesis were unsuccessful at restoring retinal perfusion. His left visual acuity deteriorated to no perception of light. Magnetic resonance imaging and computerized tomography demonstrated soft tissue density infiltrate extending