

Severe Ocular Chemical Injuries in the UK

Investigators

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Abstract

Severe ocular chemical injury in the UK is rare, but there has been a recent increase in attacks with corrosive substances reported by the Metropolitan Police and other forces across the UK. These data show that the incidence of these attacks nationally in the past year has almost doubled since 2014-15. This may be under reported as potentially, not all attacks resulting in eye injury will always be reported to the authorities.

The incidence of severe corneal chemical injury (all causes) was studied via BOSU in December 2005-November 2006, and the annual incidence was found to be 12 per 60 million population. However, given the increased incidence of deliberate chemical attacks reported in the media (supported by data from the police), the incidence and outcomes of ocular chemical injury is becoming a matter of public health concern. Despite this increase, severe ocular chemical injury is still believed to be rare, so the use of the BOSU to identify all cases nationally is appropriate to provide enough data to allow reliable conclusions to be drawn.

Case Definition

Severe ocular chemical injury is defined as chemical injury resulting in:

- Total loss of corneal epithelium, stromal haze obscuring iris details (or worse) and over 120° of limbal ischaemia (Grade 3 or 4 on Hughes-Roper-Hall classification scale)

OR

- Any skin epithelial or lash loss from the eyelid or adnexal region

OR

- Injury necessitating admission to hospital under the care of a consultant ophthalmologist for observation or treatment

Reporting Instructions

Please report any case of severe ocular chemical injury, new to you, which you have seen in the last month. Please report patients referred to you by another ophthalmologist, and also patients you have referred to another ophthalmologist.

Clinical details will be sought by questionnaire after reporting the case, and a follow up questionnaire will be sent after 6 months. Patient consent is not required, and neither the patient nor their family will be contacted. Patient management will not be affected, and no special investigations will be required. (IRAS project ID 233478)

Statement of Research Questions

1. To estimate the incidence and geographic distribution of severe ocular chemical injury in the UK in the year studied (per 1 million population).
2. To describe the aetiology of these injuries and the demographics of patients affected.
3. To assess the immediate and longer term (6 months) effects on visual acuity of these injuries.
4. To describe the current surgical management required in these cases.