LETTER TO THE EDITOR

ASHURA: A FESTIVAL OF CHARITY ASSOCIATED WITH A SERIOUS AND DISABLING EYE INJURY (REPORT OF 12 CASES)

ACHOURA: UN FESTIVAL DE CHARITÉ ASSOCIÉE À DES LÉSIONS OCULAIRES GRAVES ET INVALIDANTES (À PROPOS DE 12 CAS)

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In North African tradition, the 10th day of Muharram or ‘Ashura’ is a religious festival and traditionally a day of sharing and charity, when children receive gifts and toys from their parents and relatives. Over time, this festival has turned into a period of selling dangerous toys and products (firecrackers, fireworks), which are increasingly used by children and adolescents. They are sometimes responsible for serious and disabling eye lesions.

We report the cases of 12 children (8 boys and 4 girls), victims of serious eye injuries during ‘Ashura’, who were treated at the paediatric ophthalmology department of the CHU Ibn Rochd in Casablanca. Three children had bilateral eye injury, making a total of 15 injured eyes. The average age of our patients was 8.5 years (range: 5-16 years). Time of presentation to our department varied from one hour to seven days, but was more often rapid (<24 hours in 75% of cases). Mechanism and traumatic agent varied. In 67% of cases, injury was due to bursts of firecrackers and burning (Fig. 1).

In all cases, the accident occurred on the street. Damage to the eye varied from one patient to another, depending on the agent and mechanism of injury (Fig. 2). Lesions noted at admission for each patient are detailed in Table I.

<table>
<thead>
<tr>
<th>Type of lesion</th>
<th>Number of eyes</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyphema</td>
<td>5</td>
<td>33%</td>
</tr>
<tr>
<td>Corneal edema</td>
<td>5</td>
<td>33%</td>
</tr>
<tr>
<td>Palpebral bruise</td>
<td>4</td>
<td>27%</td>
</tr>
<tr>
<td>Ocular burn</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>Cornea wound</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Post-traumatic cataract</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Ocular hypertension</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Iridodialysis</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Retinal ischemia</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>Intravitreous hemorrhage</td>
<td>1</td>
<td>7%</td>
</tr>
</tbody>
</table>

Fig. 1 - Distribution of patients according to traumatic agent.

Fig. 2 - Overview of ocular lesions caused by different traumatic mechanisms during the festival of ‘Ashura’.

a) Total hyphema secondary to a contusion caused by a pistol ball
b) Wound of cornea secondary to a burn by a firecracker
c) Severe ocular burn following lime screening
d) Macular ischemia following a contusion caused by a plastic toy
e) Iridodialysis secondary to a contusion caused by a plastic toy
f) Total ulcer of cornea following lime screening

Table I - Details of the lesion assessment noted at admission of patients

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Evolution was good in 8 cases, with good anatomical and functional recovery. However, three cases progressed to a deep and permanent visual loss (<1/10), and one case evolved into an ocular perforation with anatomical loss of the eye.

Emergencies are more frequent during holidays and festivals. Exhaustive research on trauma related to fireworks and firecrackers, carried out using the CHIRPT database, revealed that most injuries occur during holiday periods (Table II). This same observation was reported by Zouaoui-Kesraoui, who noted an increase in ocular trauma caused by firecrackers during the festival of ‘Mawlid Ennabaoui’.2

Like other festivals, ‘Ashura’ has transformed over time into a period of selling and buying dangerous toys and explosive products (balls guns, firecrackers) (Fig. 3). Most of these toys and products are ‘Made in China’. They are available to all at a low price and usually do not comply with international safety standards (Fig. 4).

In our study and in the literature, the majority of firework-related injuries occur in children and young adolescents, with a clear male predominance. Firecrackers remain the most offending mechanism (42.9% of cases). Fireball guns are implicated in 17% of these injuries, according to our study. It should be noted that some pistols launch beads at high speed, causing major eye damage (wound, contusion).

On admission, the clinical presentations of patients requiring hospitalization vary (burn, eye contusion, ocular wounds). The same observation was made by Zouaoui-Kesraoui with reference to the festival of ‘Mawlid Ennabaoui’. Lesions of a different nature, location and severity have also been recorded (Table III).

They were primarily located on the face (40% of cases). Other lesions reported in the literature include auditory trauma, respiratory troubles or discomfort and psychiatric disorder secondary to the explosion of fireworks.

In the light of these data, our efforts should converge towards strict preventive measures and regulations to fight these serious and dramatic injuries. These efforts should also be directed at health education for our children and the public in general, particularly during critical periods such as ‘Ashura’.

BIBLIOGRAPHY

Conflict of interest. The authors have no conflict of interest to declare.

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