

■ *Letters to the editor*

Ocular trauma among children in western Nepal: agents of trauma and visual outcome

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Dear Editor,

It is important to have knowledge on the agents and modes of ocular injury for planning treatment and developing strategies for its prevention (Dulal S 2010). A prospective study was conducted to determine the patterns of ocular trauma in 126 children of Rapti Zone of mid-western Nepal over a period of one year. 57 % of the children were male. Nine (7.1 %) of the children had bilateral injury. There were two peaks of incidence of injury, in April and May (36/126, 28 %), and November and December (19 %, 24/126). Eyelid, conjunctiva and corneal injuries were detected in 12 %, 21 % and 46 % cases respectively. Perforating eye injury was found in 5 %. The left eye was more commonly affected (60.3 %). The common agents of trauma were wood sticks and grass leaves (Table 1). 35 % of the cases directly came to the eye hospital and 46 % consulted the medical shop keepers prior to coming to the hospital. Only 58 % of the cases were followed up, of which 52 % were cured, 32 % improved and 5 % deteriorated. The table given depicts the various agents of ocular trauma.

55.5 % of the children sustained trauma in the field and 26% at home, the remainder being either on the road (10 %), in the forest (5 %) or at school (3 %). 55.5 % of the children were from the age group 5-16 years and 36.5% from 1 – 5 years. 64 (51 %) children used some unknown eye drops before coming to the eye hospital, 44 (35 %) did not use any, 4 (3 %) used herbal preparations, 5 (4 %) used antibiotic drops or ointment, 2 (1.5 %) used steroid eye drops and 7 (5.5%) used breast milk.

46 % of the children consulted a medical hall, 35 % did not have any consultation, 8.7 % consulted their family members, 6 % attended a health post or a primary eye center, 1.6 % consulted traditional healers and 0.8 % consulted a doctor prior to attending an eye hospital. Nine percent of the children had an ultimate vision of less than 6/60 and 5 % no perception of light after treatment.

Table 1
Agents of ocular trauma

Agent	No. of eyes	Percent
Wood stick	39	30
Grass leaves	15	11
Corneal foreign body	15	11
Stone / mud	9	7
Physical assault	7	5.5
Unknown	7	5.5
Fingers nail	7	5.5
Grain	2	1.5
Metal	3	2
Pen/pencil	3	2
Insect	4	3
Plant sap	1	0.8
Fall from a height	5	4
Others	9	7

The Rapti Eye Hospital covers an area of 1 million population of the mid-western region of Nepal. People of this area are mostly engaged in agricultural work. The children help their parents in thier work. The incidence of ocular trauma is higher during spring and early winter. This is because of involvement of



the children in cutting foliage for their cattle and in wheat harvesting during the dry months of April and May. Similarly, November and December are the months for rice harvesting.

The Nepal national survey (1981) had shown 2.4 % blindness due to trauma. The Tribhuvan University Teaching Hospital study showed 21.1 % (Koirala S et al 1998) and the Bhaktapur eye survey (Upadhyay MP et al (1991) showed 0.7 % of blindness due to trauma. Quite a significant number of children are seen by medical shop keepers, family members and traditional healers before coming to the eye hospital. They should be trained and educated in terms of seriousness of ocular trauma and importance of timely referral to eye-health personnel. It is alarming that almost 14 % of the children had a vision of less than 6/60 after treatment. Therefore, taking measures for prevention of ocular trauma among children is strategically important to reduce the stubborn prevalence of blindness in children.

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