



Primary level management of eye injuries



Ansumana Sillah

Cataract Surgeon/Health Planner. National Eye Care Programme Manager, Box 950, Medical Headquarters, Banjul, The Gambia.



Bakary Ceesay

Cataract Surgeon. Deputy National Eye Care Programme Manager, The Gambia.

Eye injuries are common and a leading cause of preventable unilateral blindness worldwide. The causes vary, but drawing upon experience from The Gambia and Senegal, trauma is more common during the farming season and among small-scale metal workers working without eye protection. Stick injury is common in children and farmers, sometimes causing a penetrating injury that can result in the affected eye quickly becoming infected. Blunt trauma is common among children, who can be injured with a catapult or stone. The dusty environment is a common cause of corneal, conjunctival and sub-tarsal

foreign bodies injuries.

Injuries are often preventable which makes education at the community level important. Village health workers and community-based volunteers (such as 'Nyateros' or 'Friends of the Eye' in The Gambia) are important promoters of good eye health practices.

A network of community ophthalmic nurses can provide appropriate first aid and refer from village level to secondary or tertiary care. This can significantly reduce visual impairment and blindness resulting from injuries. Health facilities should be ready to deal with eye injuries by:

- ensuring that staff know how to assess eye injuries and perform basic first aid procedures appropriate to their level of training
- ensuring a supply of equipment, drugs and consumables required to assess and provide first aid for eye injury
- having a plan of how to refer patients, including nearest referral facilities, and options for transporting patients in an emergency.

The chart below provides an easy reference for community level workers faced with an eye injury in their clinic or community.

First aid management of eye injuries					
Cause of injury	 Burns	 Foreign body (FB)	 Blunt injury	 Penetrating injury	 Lid laceration
Variations	Chemical, thermal or radiation	Conjunctival, corneal or sub-tarsal (under the upper eyelid)	Blood in anterior chamber (Hyphaema)	Corneal or scleral perforation	Laceration of lid margin or canaliculus
Pain	Severe	Mild/moderate	Mild/moderate	Severe	Moderate
Vision	Reduced	Vision affected if central cornea involved	Reduced	Reduced	Normal
Torch examination	Red eye and hazy cornea	FB seen on conjunctiva, cornea or under lid	Blood seen in anterior chamber Pupil may be dilated	Cornea hazy and pupil may be distorted with uveal prolapse. Shallow anterior chamber	Laceration visible
Management	First Aid	Remove	Assess	Urgent	Refer
	Refer	or Refer	Refer	Refer	Refer
	Immediately irrigate thoroughly with clean water with special attention to particles that may be trapped under the eyelid. Apply antibiotic eye ointment and refer to eye unit immediately	Remove with edge of clean cloth. If on cornea, gently use matchstick covered with cotton wool. Refer if embedded	Rest; refer if hyphaema is severe or no improvement with bed rest by day three. Analgesics must not contain aspirin	Refer immediately to an eye unit. Tetanus toxoid 0.5ml immediately	Refer to an eye unit to ensure proper alignment of the lid margin. Tetanus toxoid 0.5ml immediately

Pictures: Helen Keller and ICEH