Eye injuries in polytrauma

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Dear Friends  
Season’s Greetings!!

Polytrauma or multiple trauma is one of the major killer now a days in all parts of the world. Most of the polytrauma cases are fetal and may result in devastating long-term disability. Treatment of polytrauma patients can be difficult as well as challenging, requiring co-ordinated team work of efficient specialists and dedicated, well trained paramedical staff. The Road / Rail traffic injury has become a major cause of polytrauma in middle or low income countries. Besides road traffic accidents (RTA), domestic accidents, natural disasters like earthquakes, land slides, cyclones and man made disasters like terrorism and communal riots/ physical violence are common causes of polytrauma. The mortality caused by road traffic accidents have increased by 79% in India.\(^1\) RTA is a major contributor to disability and health related economic loss. RTA is ranked ninth among the leading cause of loss of disability adjusted life years (DALY) worldwide, and it is anticipated to become the third leading cause by 2020.\(^2\)

The eye and it’s adnexae remains a high risk organ for injuries in cranio-facial trauma, resulting in visual impairment or blindness. Mcnestam E et al reported that 5.5% of all ocular injuries as severe in nature and among them 20 % are open globe injuries.\(^3\) Sometime ocular injury in polytrauma cases had non-reparable globe with loss of ability to perceive light.

Ocular injuries in association with polytrauma/major trauma can pose diagnostic difficulties due to reduced conscious levels, periorbital oedema/ haematoma etc. It may not be possible to assess the vision at the initial examination. Often in multiple injuries, potential vision threatening eye injuries are neglected or not much attention is given due to priority to treatment of life threatening injuries.

Early recognition of eye injuries in patients with polytrauma is of paramount importance as timely ophthalmic intervention in such patient may save vision. Multi-slice CT imaging of orbit can be a helpful adjunct to diagnosing severe vision threatening eye injuries such as orbital fractures, retinal and optic nerve injuries.

References