Management of Blast Injuries in Mass Casualty Environments

Terrorist incidents with often resulting blast injuries pose a major medical challenge because they often generate a mass casualty situation. The timing of these explosions are often such to inflict maximum injuries and impact. Bearing in mind that the impact of blast injuries and its resulting mortality corroborates with the weight of explosive, the importance of a simple but effective management of blast injuries, particularly in mass casualty situations, cannot be overemphasized.

In a mass casualty situation, the sensitivity of the ear can serve as one of the benchmarks in cases of blast injuries. This will ensure that proper screening and triaging, as well as the early detection of potentially life threatening cases. It will also ensure that primary blast injury of the ear is not overlooked.

Knowledge of the common occurrence of otological injuries like perforation of the tympanic membrane was utilised in constructing an algorithm for management of blast injury. If there is any ear injury in the absence of any other abnormalities on examination, the patient should be referred to the otolaryngologist for further management. If there is any chest or abdominal symptom with any ear signs the patient should be monitored closely for at least the next twenty-four hours and investigated further.

The screening method for management of blast injury enables detection at an early stage, potentially life threatening cases in mass casualty situations as well as ensuring that subtle injuries affecting the ear are not missed.