Algorithm for penetrating head injury

Penetrated head injury

(1) Tetanous toxoid
(2) Antibiotic with oxacillin
(3) Notify NS

missile

(1) Intubation
(2) On IV with N/S hydration
(1-2L)

(1) Progressive neurological deteriorate
(2) Pupil dilatation
(3) Hemiparesis

(+) with stable BP and HR   (-)

(1) Mannitol 1g/kg bolus
(2) Phenytoin loading 18mg/kg

(1) Brain CT
(2) Consult NS
(3) Complete shaving of head

Indicated for craniotomy - - - →

(+)   (-)

OR   GCS14. 15   ICU   GCS≤13

Observation   ICP monitor(±)

stab

(1) No attempt to remove weapon
(2) A, B, C
(3) GCS

Brain CT

Consult NS

OR

Indication for craniotomy:
1) GCS 3-5 with large extra-axial hematoma (?)
2) GCS 6-8 without transventricular injury, bi-hemispheric injury, or multiple dominant hemisphere injury
3) GCS 9-15

Indication for non-craniotomy (all of following):
1) Initial GCS>10
2) Examination within 6 hours of injury
3) Diameter of enterance wound less than 2cm
4) No exit wound
5) No extra-axial hematoma
6) No intracerebral hematoma that was enlarging or measured more than 4cm in diameter