

OREGON STATE TRAUMA ADVISORY BOARD
PATIENT MANAGEMENT RECOMMENDATIONS

Imaging Criteria in Acutely Head Injured Patients

1. CT has been shown to be superior to skull films in evaluation of patients with acute head injury because of:
 1. Ability to view intracranial contents and show bone detail
 2. Increased speed and resolution of scans
 3. Increased availability of scans
 4. Relative cost/effectiveness in current medico-legal climate
2. Skull films may still be of use in evaluation of depressed skull fractures.
3. Patients who may be exempted from scanning following head injury on arrival in ER are those who have suffered a mild head injury and have minimal risk factors for intracranial pathology. See table of risk factors. *
4. Statewide a number of hospitals have CT scanners suitable for diagnosis but no facilities and/or neurosurgeons to treat head injuries, which may or may not require surgical intervention.

Based on the foregoing the following recommendations are made:

1. Mild head injuries (GCS 13-15)
(Discretionarily excluding those with minimal risk factors.)
 - a. CT scan at first available facility
 - b. Treat or transfer as appropriate
2. Moderate and severe head injuries (GCS <13)
 - a. Treatment facilities unavailable
Stabilize and transfer
CT only if time permits because of delay in transfer
 - b. Treatment facilities available
CT and treat
 - c. Cervical spine films/CT scan

*Risk factors:

Loss of Consciousness, severe headache, nausea, vomiting or depressed skull fracture.

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Pasman P, Twijnstra A, Wilmink J, Leffers P. The value of skull radiography in patients with head trauma. *JDR-BTR* 1995;78:169-171.