

TRAUMATIC BRAIN INJURY

Assessment of closed head injury Case discussion

Participant resource kit





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Queensland Trauma Education Traumatic Brain Injury - Assessment of closed head injury: Case discussion - Participant resource kit Version 1.0

Published by the Clinical Skills Development Service Herston, Queensland, Australia csds.qld.edu.au/qte Phone +61 7 3646 6500 Email CSDS-Courses@health.qld.gov.au

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Queensland Trauma Education

The resources developed for Queensland Trauma Education are designed for use in any Queensland Health facility that cares for patients who have been injured as a result of trauma. Each resource can be modified by the facilitator and scaled to the learners needs as well as the environment in which the education is being delivered, from tertiary to rural and remote facilities.

National Safety and Quality Health Service (NSQHS) Standards













About this training resource kit

This package is designed to highlight the challenges in traumatic brain injury assessment and familiarise the learner with indications and interpretation of advanced imaging.

Learning objectives

By the end of this session the participant will be able to demonstrate knowledge of:

- Assessment history and examination in suspected traumatic brain injury.
- Investigation imaging interpretation.
- Management severe traumatic brain injury.
- Procedural skill GCS and demonstration of localising signs.

Overview of traumatic brain injury

A traumatic brain injury (TBI) is responsible for 50% of trauma deaths and 70% of all road accident deaths.¹

The early assessment of patients suffering head injury is critical to determine the likely severity of the injury and therefore commence appropriate management strategies and escalation of care as necessary.

The stages of initial hospital management are:

- 1. Perform Primary survey.
- 2. Commence resuscitation efforts.
- **3.** Perform Secondary survey.
- 4. Organise definitive care.

Further reading

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- 3. ADULT TRAUMA CLINICAL PRACTICE GUIDELINES Initial Management of Closed Head Injury in Adults 2nd Edition https://www.aci.health.nsw.gov.au/__data/assets/pdf_file/0003/195150/Closed_Head_Injury_CPG_2nd_Ed_Full_document.pdf
- **4.** Lasry, O., Liu, E. Y., Powell, G. A., Ruel-Laliberté, J., Marcoux, J., & Buckeridge, D. L. (2017). Epidemiology of recurrent traumatic brain injury in the general population: A systematic review. *Neurology*, 89(21), 2198–2209. https://doi.org/10.1212/WNL.00000000000004671

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