Abstract

This project explains the role of computed tomography (CT) in assessing traumatic brain injuries (TBI). The major components of the research include various intracranial traumas, penetrating vs. non-penetrating TBIs, symptoms, grades of injury, and treatment options. CT is essential in diagnosing a TBI because it can quickly produce hundreds of images of the brain and skull in slices. CT allows radiologists, physicians, and surgeons to plan a course of action for the best possible patient recovery outcome. Images can identify various lesions and fractures as well as their severity. A TBI can present itself as penetrating or non-penetrating, ultimately determining the type of treatment the patient will receive. The symptoms of a TBI will differ depending on whether the injury is mild, moderate, or severe. Depending on how severe the injury is, a patient may require open or closed brain surgery to remove the damaged brain matter caused by the injury. Overall, a CT scan of the brain for patients who suffered a TBI allows healthcare professionals to determine what can be done to ensure the best outcome for recovery.

Keywords: computed tomography, traumatic brain injury, intracranial trauma, penetrating, non-penetrating