

Neuroendocrine Dysfunction In Traumatic Brain Injury: Does Evaluation Improve Outcome In Acute Setting?

Dr Uday Goutam Nookathota¹

¹Neurosurgery/ Gandhi Medical College And Hospital/ India

Background :

Traumatic brain injury is one of the most common causes of mortality in young adults, with significant long term physical disability, behavioural and psychological deficits. pituitary dysfunction is unrecognised in most traumatic brain injuries. Earlier it was considered to be a rare cause of hypopituitarism. In recent times, the surge in the incidence of pituitary dysfunction due to TBI is because of increased number of RTAs and increased awareness on the same.

Objective:

The main aim of this study was to know the incidence of pituitary dysfunction due to traumatic brain injury and factors influencing incidence and severity of dysfunction. To correlate pituitary dysfunction with overall outcome.

Methods:

We have evaluated 60 patients of traumatic brain injury who met the criteria. Hormonal evaluation was done, first-within 24 hours of hospital admission and after 1 month of follow up.

Results:

Hypopituitarism was observed in 45% of patients of traumatic brain injury in acute phase, and the deficiency was attributed to adaptive response to the injury. The complete analysis and follow up is still going on.

Conclusion:

Alterations in pituitary hormones may be observed in post injury in acute phase, most common dysfunction appears to be gonadotropin and somatotropin deficiency, followed by cortisol and thyrotropin deficiency. assessment of cortisol is of vital in acute phase, as cortisol deficiency is undetected, and can be life saving if supplemented.