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PRINCIPAL INVESTIGATOR: Brent E. Masel, M.D.

CONTRACTING ORGANIZATION: Transitional Learning Center at Galveston
Galveston, Texas 77550

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**6. AUTHOR(S)**
Brent E. Masel, M.D.

Email: bmasel@tlc-galveston.org

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**
Transitional Learning Center at Galveston
1528 Postoffice Street
Galveston, Texas 77550

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**14. ABSTRACT**
The purpose of this project is to identify the incidence of post traumatic hypopituitarism (PTH) in mild TBI and develop criteria for assessing which patients with a mild TBI are at risk for developing PTH. This study will also correlate the characteristics of the individuals with PTH by neuropsychological, neurophysiological and imaging testing as they relate to functional outcome.

At 6 months post injury, patients will be screened for anterior pituitary function.

IRB approvals have been obtained and an Integrated Clinical Protocol has been developed. Operational procedures have been developed. Recruitment of subjects has not yet begun

**15. SUBJECT TERMS**
post traumatic hypopituitarism

**16. SECURITY CLASSIFICATION OF: U**

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Introduction: The purpose of this project will be to study the diagnosis of post traumatic hypopituitarism after MTBI. We will determine the incidence of hypopituitarism following MTBI and develop criteria for assessing which MTBI patients are at high risk for developing posttraumatic hypopituitarism and should have routine post-injury screening. We will also determine the relationship between post-traumatic hypopituitarism and functional outcome, cognitive recovery, and resolution of PCS at six months after MTBI. At 6 months post-injury, patients will be screened for anterior pituitary function by measuring IGF1, total testosterone in males, 17 beta estradiols in females, prolactin, TSH, and morning cortisols. Incidence of single and multiple pituitary hormone deficiencies will be determined. The clinical characteristics, MRI imaging results, EEG and MEG results of the patients who have pituitary deficiency will be compared to those of patients with normal pituitary function. The relationship between pituitary dysfunction and functional outcome, cognitive recovery, and resolution of PCS will be examined.
Body of report

**SA #2.3:** To study diagnosis of post-traumatic hypopituitarism after MTBI

**SA #2.3.1:** To determine the incidence of hypopituitarism following MTBI.

**SA #2.3.2:** To develop criteria for assessing which MTBI patients are at high risk for developing posttraumatic hypopituitarism and should have routine post-injury screening.

Relative to SA #2.3.1 and 2.3.2, IRB approval has been obtained at all institutions. The Integrated Clinical Protocol has also been developed. Clinical and organizational procedures are being refined.

At present, no subjects have been recruited.
**Key research accomplishments:**

None. The recruitment of study subject has not started.
Reportable outcomes:
None. Recruitment of study subjects has not begun.
Conclusion:
None. Recruitment of study subjects has not yet begun
References:
None
Appendices:
None