



Structural and functional brain changes in patients with TBI following post-acute rehabilitation

AIM:

To examine the effects of rehabilitation in patients with TBI by comparing subjects with and without rehabilitation.

To examine the microstructure brain damage in TBI using MRI techniques:

White matter disruption using diffusion tensor imaging (DTI)

Blood flow using arterial spin-labeling (ASL)

Synchrony of brain regions using resting state functional MRI (rsfMRI)

Task related functional MRI (fMRI)

STUDY REQUIREMENTS:

3 MRI sessions and 3 neuropsychological testing sessions

RECRUITMENT:

We need to recruit subjects that experienced TBI that did not receive intensive post acute rehabilitation. Below are the inclusion/exclusion criteria:

Inclusion Criteria:

Age will range from 18 to 60 years.

Subjects will be required to have experienced TBI.

All subjects should be fluent in English or Spanish.

All participants should have the ability to comply with the research protocol.

Exclusion Criteria:

Current diagnosis of degenerative neurological disease.

A history of cerebral vascular accidents or other acquired brain injury.

A history of major psychosis as defined by DSM-IV.

A history of previous TBI requiring hospitalization.

Current substance abuse as determined by family/ informant interview

Contraindication to MRI

TBI resulting from penetrating head wound.

Compensation will be provided to subjects upon completion of the study

IF INTERESTED PLEASE CONTACT

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