## P01-279 - HYPERSEXUALITY FOLLOWING TRAUMATIC BRAIN INJURY (TBI) AND NEUROSURGERY: CASE ANALYSIS WITH LITERATURE REVIEW

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**Introduction:** Hypersexuality is an uncommon behavioral complication associated with traumatic brain injury (TBI) involving lesions to frontal basal, temporal, or diencephalic structures. Experimental brain injury in animals has produced hypersexual behaviors; however, there is comparative paucity of knowledge in humans. TBI with hypersexuality offers insights into neurological basis of aberrant sexual behaviors as well as potential treatments. This case report describes social/sexual disinhibition in a patient following neurosurgery for self-inflicted TBI.

**Method:** Case analysis with literature review.

Results: 32-year-old male was admitted with TBI following an unsuccessful suicide attempt, self-inflicted nail gun injury to the occiput. CT scan revealed 6.5cm nail that had entered the skull in right occiput, right parasagittal location with nail head right of vein of Galen, coursing through splenium of corpus callosum, right thalamus-hypothalamus-midbrain, with its tip at the suprasellar cistern. Occipital craniotomy with retrieval of foreign body was performed eleven days after admission. From post-operative day eight through twenty-seven, patient made inappropriate sexual comments to female medical student: asking her out repetitively, describing her physical appearance, enquiring about her suitors, and requesting her to call him upon his discharge. Prior psychiatric history was pertinent for major depression and social anxiety (especially women) with psychotropic noncompliance. During admission, patient was diagnosed with recurrent major depression, social anxiety by history, and impulse control disorder nos. On sertraline titrated to 100mg qhs, depression resolved with increased control over newly acquired sexual/social disinhibition noted.

**Conclusion:** TBI can lead to social disinhibition and hypersexuality. Sertraline may be a beneficial treatment.