

# THE EFFECTIVENESS OF PHYSICAL THERAPY INPATIENT REHABILITATIONS TO ADDRESS FUNCTIONAL LIMITATIONS SECONDARY TO ISCHEMIC AREAS IN THE BRAIN CAUSED BY A COLLOID CYST OF THE THIRD VENTRICLE: A CASE REPORT

Roers E, Lippert N, Gupta J,

Regions Hospital

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## **Compliance Statement**

The first two authors had access to the patient's medical records. Due to the patient's cognitive status, verbal and written consent for this case report was gathered from the patient's parents on the patient's behalf. Anonymity and confidentiality of the patient was maintained throughout the entire process.

## **Abstract (Limited to 300 Words)**

**Background and Purpose:** Colloid cysts of the third ventricle are rare benign growths that can lead to an increase in cerebral spinal fluid causing hydrocephalus. While it is known hydrocephalus can lead to increased pressure on the brain causing decreased or absent blood flow and oxygen, there is limited evidence in the current literature describing the functional presentations and inpatient physical therapy rehabilitation interventions. The purpose of this case report is to describe the functional deficits in a 30 year old male resulting from hydrocephalus and subsequent ischemia secondary to a colloid cyst of the third ventricle and the inpatient rehabilitation physical therapy treatment approaches used to address the functional limitations. **Case Description:** A 30 year old male complaining of headache, nausea, and vomiting in the evening, found unconscious in the middle of the night, was taken to the Emergency Room. Clinical findings upon inpatient examination, 21 days following acute care admission, revealed impaired posture, decreased strength on right lower extremity compared to left, and difficulty with bed mobility, transfers, balance, gait, activity tolerance, cognition, memory, and communication. Physical therapy interventions focused on neuromuscular re-education, therapeutic activity and exercise, as well as activity tolerance. **Outcomes:** Following 23 days of intense physical therapy interventions, a statistically significant improvement score of 30/126 to 82/126 was demonstrated on the Functional Independence Measure. In addition, the patient demonstrated a statistically significant improvement of 22/91 to 63/91 and 8/35 to 19/35 on the motor and cognitive subsection, respectively. Statistically significant improvements were noted on the total and motor subsections following an additional 4 weeks of outpatient therapy, but the patient's cognitive subscale remained unchanged. **Conclusion:** Physical therapy inpatient rehabilitation interventions demonstrated statistically significant improvements in functional mobility following cerebral ischemia due to a colloid cyst. Similar improvements in cognition were not observed.