Optimizing Participation and Functional Progress With Physical Therapy Treatment for the Acute Care Patient During a Long Term Stay: A Case Study

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Background & Purpose: Length of stay (LOS) for a patient in an acute care hospital can be as short as a few hours and as long as several months. As a PT working with patients during an extended hospital stay, it is important to keep patients and their families actively engaged in rehabilitation sessions. In addition, the increased LOS poses increased challenges for the rehabilitation team. The purpose of this case report is to describe the physical therapy plan of care including various interventions and collaborative efforts for a patient during a 7 month stay while increasing participation and progression toward functional goals.

Case Description: A 6 year old female was transferred to NYULMC from an outside hospital for neurosurgical intervention of a suprasellar mass. Patient underwent an endoscopic biopsy that was complicated by post-operative hemorrhage and subsequently underwent a left frontal craniotomy for evacuation of the hemorrhage, resection of tumor and decompressive hemicraniectomy. At initial PT evaluation, the patient was dependent of one to two therapists for all mobility, transfers, and sitting balance. Over the next 7 months PT played an integral part in the rehabilitation process. PT sessions averaged one hour in length, 5 days per week, with use of 2 therapists for effective patient handling. PT initially focused on bed mobility, sitting tolerance and balance, and chest PT. As the patient progressed, treatment included the use of a tilt table, mat therapy, and a physioball/peanut to work on protective and righting reactions. Collaborative efforts were made to include music therapy, OT, and SLP to greater utilize the rehab team. Family was also consistently involved during sessions, implementing strategies worked on during PT into their daily routine. They actively played with patient and brought in personal toys, held the patient despite lines and tubes, encouraged time outside of bed in wheelchair, provided motivation from twin sibling, and utilized the iPad and Skype to include family members that could not be present at the bedside.

Outcomes: The use of family, music therapy, and novel interventions including mat play and the tilt table allowed for an ever changing and active environment for the patient. Utilizing the family allowed for carry over of interventions outside of PT sessions and optimized relationship building between the physical therapy team, patient, and family. Overall, the positive family and interdisciplinary dynamic allowed for the patient's steady functional progress and kept the patient
engaged. At discharge, she could roll with supervision, perform supine to sit with minimal assist and maintain sitting balance with close supervision for 3 minutes.

**Discussion:** Long term admission in the acute care setting can become monotonous for the patient, family members and the PT team. As physical therapists, it is important to be creative with treatment plans to assure active patient participation and continued functional progress during a long term stay.