Preventing Syncopal Events During Therapy

The Problem

Syncope is defined as "the abrupt loss of consciousness associated with the absence of postural tone; it is followed by a rapid and usually complete recovery." After admission to BIDMC, a patient is often first mobilized by a Physical or Occupational Therapist. Because of this, syncope is a fairly common complication of treatment. The inpatient rehabilitation services department noticed a high incidence (nearly 1 per week) of syncopal events via incident reporting. An investigation was done to determine if there were any trends in practice or patient populations in which syncopal events occurred, and if these events were preventable.

Aim/Goal

Our aim was to reduce the frequency of syncopal events during physical or occupational therapy treatment by examining our practice and noting any trends in patient population or therapist approach. We then aimed to create an in-service program to educate staff on action/procedures to avoid syncopal events.

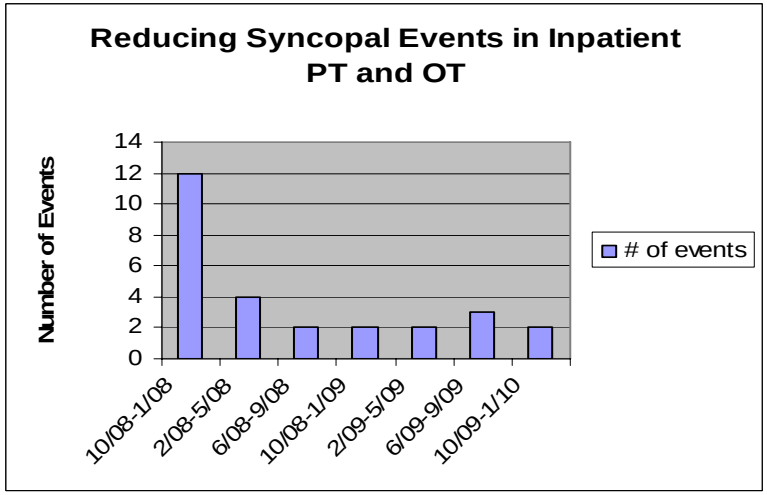
The Team

- Laura Driscoll, PT, DPT Inpatient Team Leader
- Stacey Adamson, PT, DPT Inpatient Team Leader
- Deb Adduci, PT Clinical Manager of Inpatient PT and OT

The Interventions

- Detailed chart reviews of all syncopal events were performed for a four month period of time.
- Characteristics in practice were noted surrounding the events.
- A staff in-service was performed in May 2008 to review syncope and best practice for monitoring vital sign response to position change. A quiz was given to the staff following the in-service.
- A copy of the in-service and quiz are included in the rehab services orientation binder
- Therapists perform a full orthostatic vital sign assessment with all new evaluations.

The Results/Progress to Date



Following the in-service we saw an average of 75-85% reduction in syncopal events during therapy per quarter.

Lessons Learned

Orthostatic hypotension (OH) is defined as a decrease in systolic blood pressure of at least 20 mmHg and in diastolic blood pressure of at least 10mmHg following a change in position. Timing of vital sign assessment is crucial. A therapist needs to wait 2-3 minutes after position change to assess for OH. Heart rate should be assessed as well to aid in the differential diagnosis. There are many causes of hypotension and all of our patients should have a complete vital sign assessment with mobility.

Next Steps/What Should Happen Next

We will continue to investigate all syncopal events and perform regular in-servicing of new staff in order to ensure best practice. Staff will be given feedback on technique of vital sign assessment during bi-annual competency reviews and quarterly peer-reviews.

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