

# Reducing Symptomatic Postoperative Hypotension in the Extended Stay Patient



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## Introduction

Postoperative patients can exhibit hypotension secondary to anesthesia and blood loss. Patients that are on bedrest for an extended period after surgery are more at risk for orthostatic hypotension. Additionally, patients who receive a spinal block have an increased likelihood of orthostatic hypotension. These factors can contribute to a higher incidence of hypotensive symptoms when first mobilizing extended stay patients. Symptoms, including syncope/near syncope, nausea, vomiting and diaphoresis, potentially lead to an increased risk for falls, reduced patient satisfaction, and delayed discharge.

## Purpose

To form a quality improvement plan to reduce the incidence of hypotensive symptoms when mobilizing extended stay postoperative patients.

## Question

What nursing tasks can be implemented to reduce the symptoms of postoperative hypotension after surgery?

## Hypothesis

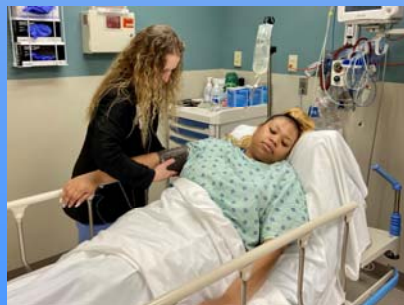
If nursing staff assures adequate hydration, raises the head of the bed and encourages PO intake prior to ambulating, hypotensive symptoms may be decreased in the Observation Unit.

## Results

- 156 patients included 121 overnight stay and 35 extended stay patients.
- Patients in the study had a lower blood pressure postoperatively than preoperatively.
- 11% of patients who received spinal blocks experienced hypotensive symptoms when first ambulating.
- 3.3% of overnight stay patients displayed symptoms when ambulating the morning after surgery.
- Only 3 overnight stay patients in the study did not receive breakfast; 2 of the 3 experienced hypotensive symptoms.
- 4 overnight stay patients did not have the head of their bed elevated above 60 degrees; 2 of these patients experienced symptoms.

## Methods & Materials

Data was collected over a 3-month period on 156 patients in the Observation Unit. Data tracked blood pressures, hypotensive symptoms, along with variables that nurses observed to affect this patient population's incidence of hypotensive symptoms. These included treating hypotension with an intravenous bolus, raising the head of bed, and assuring patients eat prior to mobilization.



## Results/ Comments

Data confirmed that blood pressures are lower postoperatively, indicating that patients are at risk for orthostatic hypotension and related symptoms. Also, shown was a higher incidence of hypotension in patients with a spinal block. Data also supported the proposed theory that patients whose head of bed was elevated and who ate prior to mobilization were less likely to experience symptomatic hypotension.

## Data Collection

Post-operative Hypotensive Symptoms in the Extended Stay Patient Assessment Tool:

	Patient #1 Date_____	Patient #2 Date_____	Patient #3 Date_____	Patient #4 Date_____
Surgery	_____	_____	_____	_____
Pre-operative blood pressure	/ /	/ /	/ /	/ /
Last PACU blood pressure	/ /	/ /	/ /	/ /
Blood pressure prior to initial mobilization	/ /	/ /	/ /	/ /
Is this less than the pre-operative blood pressure?	Yes or No	Yes or No	Yes or No	Yes or No
Did patient exhibit hypotensive symptoms with ambulating? If so, please list symptoms.	Yes or No	Yes or No	Yes or No	Yes or No
Prior to physical therapy:				
1. Did the patient eat breakfast?	1. Yes or No	1. Yes or No	1. Yes or No	1. Yes or No
2. Was the head of bed increased greater than 60 degrees?	2. Yes or No	2. Yes or No	2. Yes or No	2. Yes or No
3. Were the lights turned on?	3. Yes or No	3. Yes or No	3. Yes or No	3. Yes or No
Was there a delay in discharge secondary to hypotensive symptoms? If so, how long?	Yes or No	Yes or No	Yes or No	Yes or No

## Implications for Nursing

Findings from this study can be a guide on actions perianesthesia nurses can perform to promote the best outcomes for mobilizing postoperative patients in extended stay areas.

## Conclusion

Staff was educated on postoperative patients' risk for hypotensive episodes. An improvement plan was implemented to optimize patient safety, patient sense of well-being and satisfaction, along with timely discharge. The plan includes assuring adequate hydration, verifying the patient has eaten, and elevating the head of the bed greater than 60 degrees at least 30 minutes prior to mobilization.

## References

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