### SPACELABS HEALTHCARE

## CARE TEAM CORNER

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## Nurse to Nurse

#### Insights from the front line of care.

Every facility is unique. That is why Spacelabs' team of Clinical Education Consultants (CEC) work with hospitals across the country every week to help ensure device installations are successful and users have the knowledge and confidence to get the most out of their new monitoring systems. CECs work closely with hospital care teams, delivering training customized to each facility's unique workflow and environment to help caregivers optimize their workflow as well as improve patient care and safety.

#### **Overview**

#### This edition focuses on the following topics:

- Alarm management around the post-CABG patient
- Common arrhythmias seen post-CABG
- Early ambulation benefits

Spacelabs Healthcare delivers continuous innovation in healthcare technology for better clinical and economic outcomes.



#### **Our Author**

A registered nurse for 23 years, Alayna holds a BS in Nursing and Master's in Business Administration. She has spent most of her career working in the CVU/CTICU (Open Heart ICU) as a bedside nurse. Prior to joining Spacelabs, Alayna was Director of Nursing for six years, overseeing a 400-bed Acute Care Hospital and a 200-bed Skilled, Rehab, LTAC, Home Health, and Psychiatric facility.



# Alarm management around the post-CABG patient.

Alarm management is a critical tool when caring for the post-CABG patient. Although alarm management is utilized in all areas, it is particularly important in this patient type. Patients respond to all surgical procedures differently, and cardiac surgery is no exception. The cardiothoracic surgeon typically outlines very specific instructions for the nurse caring for the patient post-CABG. It is very important to set alarms, parameters, and priorities according to these directives. It is imperative that the nurse focuses on those alarms critical to tissue and organ perfusion to aid in the healing and recovery process.<sup>1</sup>

In the Journal of Cardiovascular Nursing, authors Caron Martin and Sandra Turkelson highlight six areas of focus for vigilant nurses that can help prevent post-operative complications:<sup>1</sup>

- Assessing the patient for cardiac dysfunction and hemodynamic instability.
- Monitoring the interrelationship between heart rhythm and rate, preload, afterload, contractility, and myocardial compliance to achieve this outcome.

- Maintaining blood pressure within ordered parameters to provide tissue perfusion and prevent disruption of the surgical connections. Blood pressure that is too low or too high can have negative consequences.
- If hypothermia occurs, the nurse must rewarm the patient.
- It is important to maintain effective cardiac output after open heart surgery to provide sufficient tissue perfusion.
- In addition to relying on the values obtained with hemodynamic monitoring, nurses must always use effective clinical assessment skills when evaluating and managing their patients.

The treatment of the CABG patient is intense, complicated, and gratifying, as nurses play a critical role in making this return to health a possibility for the patient.<sup>1</sup>



### Common arrhythmias seen post-CABG.

Arrhythmias are very common after cardiac surgery and can be a major cause of morbidity, increased hospital stay and increased costs.<sup>2</sup> Both tachyarrhythmias and bradyarrhythmias can present in the postoperative period. The most common arrhythmias that occur are atrial tachycardias, or atrial fibrillation. The treatment of these arrhythmias depends mostly on the patient's history and how they respond to the arrhythmia.<sup>3</sup> A thorough review of the patient's medical history, as well as previous post-surgical complications, can lend to discovery of the appropriate treatment.

Closely monitoring the patient's response to the arrhythmia is critical. Close observation and hemodynamic

monitoring are needed. In most cases, the surgeon has outlined specific actions in response to their hemodynamic status. These orders are then followed by the nurse caring for the patient to maintain hemodynamic stability. Most often, these arrhythmias will resolve with medication administration, although the need for further intervention may be needed.<sup>3</sup>

### Early ambulation benefits.

#### The benefits of early ambulation are clear.

Common benefits of early ambulation after surgery include:<sup>3</sup>

- Supporting blood flow of oxygen throughout the body while maintaining normal breathing functions.
- Promoting circulation, which can help prevent the development of stroke-causing blood clots.
- Enhancing blood flow, which aids in quicker wound healing.
- Improvement of gastrointestinal, pulmonary, and urinary tract functions.
- Increasing muscle tone and strength, especially those of the abdomen and ankles.
- Improving coordination, posture, and balance. Early ambulation also helps in joint flexibility, particularly in the knees, hips, and ankles.
- Appetite improvement
- Encouraging the patient's feelings of independence, their mood, and their self-esteem.
- Patients who ambulate during their care stay are usually discharged sooner.<sup>3</sup>

One of the most common post-CABG surgical complications is infection. Infection may occur locally at the wound site, or systemically. In "Why is Ambulation Important to Recovery?" the OakBend Medical Center cites early ambulation as one of the best preventative measures against infection. Sitting the patient up in bed helps to promote drainage of the chest. This leads to the ability to remove lines and tubes more quickly. Since any lines, tubes, and drains can attribute to infection, the earlier they are removed, the better. This removal also aids in early ambulation of the patient. Early ambulation promotes healing and decreases the incidence of infection, both locally and systemically.

In the case that a patient is unable to ambulate, providing the nurse with tools that help in the passive movement of the patient will also be beneficial. Whether the patient can ambulate on the unit, or is confined to a bed or chair, monitoring capabilities help to ensure that the patient is perfusing adequately and expedites the healing process.





# Our Spacelabs CEC team possesses extensive experience in all care areas.

At Spacelabs, we believe that collaboration is the key to successful training and use of our products. Our goal is to ensure that the most efficient workflows and alarm management practices are established and implemented, so your care team can provide the best care experience for your patients and their families. Our Clinical Education Consultant (CEC) team possesses extensive experience in all care areas, delivering tailored and relevant learning to meet your clinical requirements, workflows, and organizational goals. Spacelabs Clinical Offerings include a blend of eLearning, onsite installation, and consultative education provided by nurse clinicians and specialists.

References

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- 2) https://www.hindawi.com/journals/crp/2014/615987/
- 3) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3912619/
- 4) https://www.oakbendmedcenter.org/why-is-ambulation-important-to-recovery/

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