Preoperative Care

Preparing patients for surgical procedures is an important nursing role. It includes preoperative education to inform the patient of what to expect and measures that can be taken to prevent complications.

PLAY PICMONIC

Preop Education

Surgical Procedure

Surgeon explaining Procedure

Providing the patient with education on what to expect before, during, and after surgery meets therapeutic outcomes, patient autonomy and decision-making. For surgical preparation, nurses assess the patient's health history, physical examination and support the surgical team by collecting relevant data for comprehensive understanding of the patient's current health status. Facility-approved standardized forms can help nurses and clinicians address all relevant aspects of pre, intra and postoperative care. Finally, identifying the patient's deficient knowledge, barriers to understanding (e.g. anxiety) and other barriers or challenges assure patient understanding and improve therapeutic outcomes.

Education on the Pos-surgical Period

NPO

NPO-zipper-mouth

NPO stands for nothing by mouth, which instructs the patient to withhold oral food and fluids prior to surgery for a prescribed amount of time. Patients undergoing general anesthesia, or regional anesthesia with conscious sedation are often placed on NPO status the night before surgery to prevent aspiration pneumonia. The start of NPO (e.g. a fasting time) is dependent on multiple patient-centric variables. The American Society of Anesthesiologists recommend minimal fasting times dependent on type and amount of food and liquid intake. Surgical teams (nurses, surgeons, and other clinicians) plan strategies like providing a liquid-based evening meal or allow a limited morning oral intake of fluids to facilitate essential administration of oral medication (e.g. antihypertensive medication).

Turn, Cough, Deep Breathe, Incentive Spirometer

Turn Coughing Coffee-pot, Deep Breathe, with Incentive Spirometer

To prevent respiratory problems from occurring after surgery, instruct the patient to "turn, cough, deep breathe" and help prevent many different postsurgical complications: the formation of pressure ulcers, impaired gas exchange, inadequate tissue perfusion, increased pain and development of postsurgical respiratory disease. "Turn" refers to assisting a patient primarily on bedrest to turn every 2 hours and promotion of early ambulation. "Cough" refers to effective airway clearance via a coughing technique (e.g. "splinted" cough) to improve ventilation and gas exchange. "Deep breath" improves ventilation, oxygenation and perfusion and is proven to decrease pain and postsurgical anxiety. The incentive spirometer is a useful tool for teaching how to deep breath and is encouraged frequently (at least every 2 hours).

Lower Extremity Exercises

Lower Leg Exercise

Lower extremity exercises are important to help prevent blood clots and promote venous return of blood in the postsurgical period. Early ambulation with or without assistance from a nurse or other clinician is a goal for the postsurgical patient. For patients who need assistance with ambulation, two common, self-autonomous exercises include asking the patient to point and flex their toes or rotate their ankles one at a time 10 times per hour.

Compression Stockings or SCD's

Stocking and SCD

Along with early ambulation and prescribed leg exercises, the patient may prescribed elastic stockings (TEDs) or sequential compression devices (SCDs). These devices help promote blood flow via improved venous return and prevent the formation of blood clots (thrombi or emboli) when the patient is resting

in bed or in a chair. Another common practice to prevent thrombus or embolus formation is the use of prophylactic thrombolytics like daily subcutaneous heparin or enoxaparin injections.

Pain Management

Pain-pill-hero

Pain management may be explained preoperatively, and includes self-autonomous practices (deep breathing, distraction, meditation, prayer), how to notice and communicate the presence of pain, and explaining the pain management strategy. Pain is better controlled before it becomes severe, and routine use of pain medication (including opiates) is routinely prescribed for at least the first 24 to 36 hours postoperatively. Patient controlled analgesia (PCA) provides immediate pain relief managed by the patient via self-administration of pre-set, timing dependent doses of pain medication.

Day of Surgery

Informed Consent

Informed Consent signature

Informed consent refers to a patient consenting for a surgical procedure after being educated on the procedure, alternative therapies, and risks. It is the legal responsibility of the surgeon to obtain a patient or representative-signed informed consent prior to starting any surgical preparation, unless the procedure is an emergency as defined by state health licensure boards and officials. A licensed nurse or other licensed healthcare representative can act as a legal witness present to this education and consent.

Physical Preparation

Being Physically Prepared

Physical preparation refers to preparing the patient and surgical team, and depends on the type of procedure, the patient's current and anticipated health status, managing unforeseen complications (e.g. staffing) and preparing for the postoperative period (e.g. obtaining a recovery room, admission to the hospital, etc). For the arriving patient: obtaining baseline vital signs, donning a gown, accounting for personal affects, starting an IV, emptying the bladder, and preparing the skin to mitigate postsurgical infection may all be included.

Preop Checklist

Preop Check-list

The preop checklist drives preparation of the patient and surgical team and includes tasks such as assuring the presence of legal documents (e.g. informed consent), administering preoperative medications, safeguarding valuables (such as jewelry), assuring the presence and/or communication for the patient representative and other tasks.

Handoff to Surgery

Handing off to Surgeon staff

The patient handoff to the surgical staff occurs through a standard communication process (such as the mnemonic SBAR for "situation, background, assessment and recommendation"). The Joint Commission requires medical facilities to develop, define and implement methods to assure pertinent patient information is communicated from one patient environment to the next. An example is when a preoperative surgical team communicates pertinent information to the surgical team, including written (the preoperative checklist, signed informed consent, patient's chart) and verbal (SBAR, further patient questions for the surgical team) communication.

Universal Precautions

Universal Time-out

The Joint Commission established Universal Protocol guidelines in an effort to prevent wrong site and wrong procedure surgeries from occurring. The 3 principles include (1) conduct a pre-procedure verification process (2) mark the procedure site and (3) perform a time-out.