

Perioperative Assessment of the Older Adult

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WHY: America's older adults comprise the fastest growing segment of the U.S. population. They account for 55% of all operative procedures performed in the U.S. (GNRS, 2007). Advanced age alone does not preclude surgical interventions aimed at improving function or quality of life. However, a decrease in physiological reserves, the presence of multiple chronic conditions, and functional impairments have all been associated with increased risk for adverse surgical complications (GNRS, 2007; Smith & Cotter, 2008).

BEST PRACTICE APPROACH: The primary aims of the perioperative care of the older adult are to: 1) promote patient safety through adaptation of the physical environment, communication approaches, and therapeutic interventions, including medication adjustments, to accommodate age-related changes; 2) prevent injury and adverse events (i.e. falls, pressure ulcers, infections, post op complications); and 3) attain the best surgical outcome to restore maximal functioning, prevent delirium and provide adequate pain management.

The perioperative period comprises three distinct time frames: 1) the pre-operative period which begins with the decision to have a surgical procedure and ends with the patient's transfer to the operating room; 2) the intraoperative period which commences with the patient's arrival in the operating room, includes the operative period and ends with transfer to the Post Anesthesia Care Unit (PACU); and 3) the stay in the PACU and transition to the home or another location.

TARGET POPULATION: Older adults over the age of 65 years or persons under 65 who have multiple, complex, chronic conditions and whose health status necessitates a surgical intervention.

VALIDITY AND RELIABILITY: Psychometric testing has not been done.

STRENGTHS AND LIMITATIONS: Though psychometric testing has not been done, this approach represents best practice endorsed by the American Association of Operating Room Nurses (AORN) and the Joint Commission for Accreditation of Hospitals and Organizations (JCAHO).

FOLLOW UP: Ensure continuity of care throughout all perioperative periods and transition to home or another location.

MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGeriRN.org.

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Guidelines for the Perioperative Care of Older Adults Perioperative Period

1. Interview the patient and family members upon admission to the perioperative area. (For patients with dementia, see suggested communication strategies in *Try This* Issue D7: Communication Difficulties).
2. Verify correct patient identification using a minimum of 2 separate sources (i.e., have the patient acknowledge his/her name, and birth date when addressed, and check the name on the patient's identification bracelet).
3. Assess the patient's mental status (See *Try This* Issue 3: Mental Status).
4. Assess the patient's understanding. Using "teach back" methodology, request that the patient explain the procedure to be performed, the risks and benefits and expected outcomes of the planned procedure.
5. Review the medical record for:
 - Past Medical History:** The presence of chronic diseases including dementia or other cognitive impairments;
 - Medication history:** Prescription and over the counter medications (laxatives, herbs, vitamins and supplements,) medications taken the day of the procedure, and those withheld until after the procedure;
 - Allergies:** Medications, including antibiotics, foods, iodine, dyes, latex, and tape;
 - Past Surgical History:** Prior surgeries, any prosthetics or implantable electronic devices, reactions to anesthetics, prior blood transfusions, any complications;
 - Social History:** Use of alcohol, illicit drugs and tobacco products; social support systems and aftercare arrangements; and baseline functional status (See *Try This* Issue 2: Katz Activities of Daily Living and Issue 23: Lawton Instrumental Activities of Daily Living).
6. Verify the correct surgical site for the procedure (JCAHO, 2010).
7. Physical exam: Include blood pressure, pulse, respirations, pulse oximetry; Review available lab and diagnostic tests—Complete blood count with differential, complete metabolic panel (electrolytes, glucose, renal function, albumin, liver function tests), urinalysis, electrocardiogram, prothrombin time (PT) and International Normalized Ratio (INR), platelets, chest x-ray, type and cross-match.
8. Review post operative care instructions; have the patient demonstrate appropriate coughing, deep breathing, etc.
9. Ensure advanced directives are included in the chart.

Intraoperative Period

1. Assess the skin for: Color, capillary return, circulation, temperature, and any areas of breakdown or areas at risk to prevent pressure ulcers.
2. Ensure patient safety and proper positioning and correct anatomical alignment on the operating room (OR) table—Have a minimum of four people assist with transfers; pick up the patient; do not slide or pull the patient (the friction and shearing force may result in skin breakdown); do not leave the patient unattended on the OR table; use safety belts to prevent falls; pad bony prominences--back of the head, elbows, knees, sacrum, heels (AORN, 2011); ensure proper placement of electrical grounds.
3. Take a "Time Out" before beginning the procedure to verify the correct person, procedure and site (JCAHO, 2010).
4. Monitor vital signs, intake and output: Monitor and record intake of intravenous (IV) fluids and blood products, urinary output, and blood loss.
5. Prevent heat loss: Increase the temperature in the OR; apply warm blankets; utilize warm infusion and irrigation fluids; minimize exposed skin areas (AORN, 2010).

Post Operative Period

1. Assess airway, breathing and circulation (ABCs).
2. Monitor vital signs, urinary output, blood loss; Note any signs and symptoms of hypovolemia, bradycardia/tachycardia/arrhythmias, signs of cardiac ischemia; ability to clear secretions, return of the gag reflex.
3. Assess mental status, including screening for delirium (See *Try This* Issue 3: Mental Status, Issue 13: Confusion Assessment Method and Issue D8: Assessing Delirium in Patients with Dementia).
4. Assess and manage pain (See *Try This* Issue 7: Assessing Pain in Older Adults and Issue D2: Assessing Pain in Patients with Dementia).
5. Continue interventions to prevent complications, skin breakdown, falls and injury, medication errors, deep vein thrombosis, and aspiration.
6. Prior to discharge, the patient's vital signs must be stable without a fever. The patient must have a dry dressing and adequate urinary output, void on their own, without bladder distention.
7. Verify postoperative instructions with the patient and family/caregiver.
8. Assess understanding of follow up appointments, effective pain management, schedule for analgesia, any dietary or activity restrictions and when to notify the provider.