



Perioperative Care

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Perioperative Care Consists of:

- Preoperative Care
- Preoperative Planning
- Preoperative Evaluations
- Postoperative Management
- Postoperative Problems
- Postoperative Complications

[Preoperative Care]

- Diagnostic Work Up
- Preoperative Evaluations
- Preoperative Preparations

[Diagnostic Workup]

- Determine the cause and extent of the illness

[Preoperative Evaluations]

- Overall assessment of patient's health
- Identify significant abnormalities that may increase operative risk
- Should begin with a complete history and physical evaluation
- Routine laboratories pertinent to surgery
- Evaluation by the anesthesiologist

Specific Factors Affecting the Surgery

- History of angina or infarction
- History of anemia, lung disease, kidney disease, bleeding problems
- Nutritional status

Factors Affecting Wound Healing

- Steroids
- Malnutrition
- Radiation
- Diabetes

Factors Leading to Postop Infection

- Diabetes
- Renal failure
- Steroid medications
- Immunosuppressive agents
- Smoking
- Preoperative infection

[Special Problems]

- Diabetes
- Thyroid Disease
- Heart Disease
- Respiratory Disease
- Kidney Disease
- Hematologic Disease
 - Anemia
 - Thrombocytopenia
 - Abnormal bleeding
 - Medications (coumadin etc)

Dangerous Preoperative Herbal Medications

- Ask about all Herbal medications !
- Herbs that may interfere with bleeding time
 - Gingko
 - Feverfew
 - Ginger
 - Vitamin E

Dangerous Preoperative Herbal Medications

- Herbs that may trigger high blood pressure
 - Ginseng
- Herbs that may lower blood pressure
 - Garlic
- Herbs that can intensify or prolong anesthesia
 - St. John's wort
 - Kava kava

[Preoperative Preparations]

- Informing the patient about the risks and benefits of the surgery
- Providing necessary pain control and discussing pain control options

[Preoperative Preparations]

- Patient should quit smoking at least 2 weeks before surgery
- Patient should quit herbal supplements mentioned at least 2 weeks before surgery
- Bowel preparation in advance might be helpful

[Orders]

- Nothing by mouth at least 8 hours before surgery
- Labs and xrays
- Prepare blood (if necessary)
- Sedation and pre-op anesthetic meds
- Hydration and IV access
- Enema, foley catheter
- Prophylactic antibiotics
- Invasive catheters
- Consent for surgery

Immediate Postoperative Period: First 1-2 hours

- Anesthesiologist in charge of cardiopulmonary functions
- Surgeon responsible for all the rest

[Surgeon's Responsibilities]

- Monitor vital signs
- CVP, Swan-Ganz reading, ICP, distal pulse
- Fluid balance, electrolytes
- Respiratory care
- Position in bed
- Mobilization
- Drainage tubes
- Medications
- Diet

Postoperative Pain Control

- Parenteral opioid
 - Morphine 10 mg q 3-4° given IV or IM
 - Meperidine 75 – 100 mg q 3°
 - Hydromorphone 1-2 mg IM q 2-3°
- Non-opioid analgesic
 - Toradol 30 mg (no respiratory side-effects)
- Epidural anesthesia

Postoperative Pain Control

- Oral analgesics
 - Tylenol #3 (with codeine)
 - Darvocet N-50 (propoxyphene)
 - Vicodin (hydrocodone)
- Patient-controlled analgesia
- Intercostal nerve block

[Postoperative Complications]

- Wound complications
 - Hematoma
 - Seroma
 - Wound dehiscence
 - Infection

[Postoperative Complications]

- Pulmonary Complications
 - Atelectasis
 - Aspirations
 - Pneumonia
 - Post-operative pleural effusion
 - Pneumothorax

Postoperative Complications

- Fat embolism
- Cardiac complications
 - Arrhythmia
 - Frequently due to hypoxemia, hypokalemia, alkalosis
 - Postoperative myocardial infarction
 - Cardiac failure
- Urinary complications
 - Retention
 - Acute tubular necrosis
 - Urinary tract infection

Postoperative Complications

- Peritoneal complications
 - Hemoperitoneum
 - Peritonitis
- Cerebral complications
 - Cerebrovascular accident
 - Convulsions
- Psychiatric complications
 - ICU syndrome
 - Delirium
 - Sexual dysfunction
 - Delirium tremens (alcohol withdrawal)