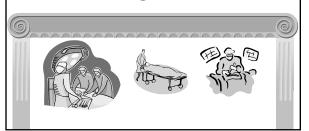
# **The Surgical Client**



# SURGERY

- Surgery is considered a major life experience for the client and his family, even if considered minor by healthcare personnel.
- → Pre and post op care should be directed toward a reduction in the client's stress and trauma and prevention of complications.

## Classification of Surgeries

- → According to degree of risk (major, minor)
- → According to degree of urgency (Elective, urgent, emergent)
- → According to purpose (diagnostic, palliative, reconstructive, constructive)
- According to specialty (neurosurgery, orthopedics, general surgery, vascular surgery)

### Purposes of Surgical Procedures

- →Diagnostic
- **→**Palliative
- **→**Ablative
- **→**Constructive
- **→**Transplant



### The Surgical Process

- → Preoperative begins when the decision is made for the client to have surgery until transfer to the OR suite
- → Intraoperative begins when client enter the OR and ends when transferred to recovery room
- → Postoperative begins upon admission to PACU and ends with final follow up by physician (Healing is complete)

#### INFORMED CONSENT

- → Name and intention of surgery
- → Name and qualifications of surgeon
- → All risks
- Chances of success
- → Possible alternatives
- → The right to refuse or to change mind later

### LEGAL CONSIDERATIONS

- → Informed Consent
- → Who should obtain consent?
- → Who can sign for consent?
- → Who can be a witness?
- → What is an emancipated minor?
- → What happens during an emergency?
- ♦ What is the nurse's role?



#### **PREOPERATIVE**

- →Need to establish a baseline assessment of the client utilizing interview and examination
- →Need to prepare the client for anesthesia administration and actual surgery

## 9

### Preoperative Assessment

- → Medical history
- →Physical examination
- →Nursing history
- →Diagnostic data from studies



### Stressors to Surgery

- → Age
- → Nutritional status
- → Anxiety
- ◆ Chronic disease
- General health status
- → Addictions
- → Previous experiences
- Radiation therapy
- → Use of therapeutic drugs

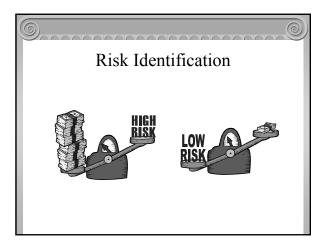
# Systems Review

- →Respiratory status
- →Cardiovascular status
- →Hepatic and renal function
- →Fluid and electrolyte status

# **O**

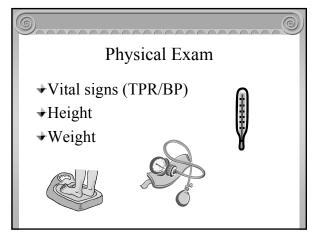
#### Presence of Chronic Disease

- →Diabetes Mellitus
- →Heart disease
- COPD
- →Liver disease
- →Renal disease
- →Bleeding Disorder





- → Current health status
- Allergies
- Medications
- → Previous surgeries
- Mental status, coping skills
- Understanding
- → Smoking, alcohol use
- → Social and cultural considerations



# Health Problems Increasing Risk

- Malnutrition
- Obesity
- Cardiac conditions
- Blood coagulation disorders
- → Upper respiratory disease or COPD
- Renal disease
- Diabetes
- → Liver disease
- Uncontrolled neurological disease

## Diagnostic Data

- → Chest X-ray
- **→** EKG
- **→** CBC
- → Urinalysis
- → PT/PTT
- → General metabolic screen
- → Type and crossmatch

# Nursing Diagnosis

- → Knowledge deficit (pre operative and postoperative care) related to lack of experience with surgery
- → Fear related to effects of surgery
- → Anxiety related to anticipation of pain
- → Risk for infection related to resident and transient skin bacteria

#### Goals

- → Client will verbalize the correct method to cough and deep, the correct use of a spirometry unit, and the importance of early ambulation by 12 noon on 11-10-02.
- → Client will verbalize three methods to promote relaxation and decrease anxiety by 12 noon on 11-10-02.
- ♣ Also p. 861



### Implementations

→ Focus on the physical and psychological preparation for surgery



#### **PLANNING**

- → Surgical preparation
- → Teaching preoperative, procedures, treatments, post operative
- → Anxiety reduction
- Coping enhancement
- → Family support
- → Decision making support

### 9

### **Physical Safety Implementations**

- → Bathing and use of germicidal soap
- → Skin scrub and prep
- Skin shave
- → Long hair –no hair pins
- → Short gown, no clothes
- → Don't forget name bands
- → May need to mark OR site



### Physical Safety Implementations

- → Remove any false parts, contacts
- → Remove jewelry, may tape wedding band
- Care of valuables





### Oxygenation

- → Risk for ineffective airway clearance or impaired gas exchange related to administration of anesthesia
- ★ Assess for fever or cough, pulmonary congestion
- Circulation anti-ems, venous compression boots
- → Remove dentures, prosthesis



#### OXYGENATION

- → Assess for loose teeth, check braces and rubber bands
- → Remove make-up and nail polish (OK to have artificial nails)



### **Nutrition Concerns**

- ★ Keep NPO 6 to 8 hours pre-op (NPO/12)
- → Remove water pitcher from bedside
- → Explain fasting to client
- → Frequent oral care
- → Hold oral drugs unless ordered to be given with a sip of water
- → Hold insulin unless directed by md to give half dose or provide coverage



#### **Nutrition Concerns**

- Report to anesthesia if client did not remain NPO
- → Usually IV therapy ordered
- → May have N/G inserted



### 9

#### **Elimination Concerns**

- → If colon or gyn surgery may need enemas
- → May have NG inserted
- → Must void prior to surgery
- → May have foley cath inserted



### Activity, Rest, Sleep

- → May have taken a hypnotic or anti-anxiety drug the night before surgery
- → May have pre-op medication ordered
- → Safety precautions must be implemented if medicated





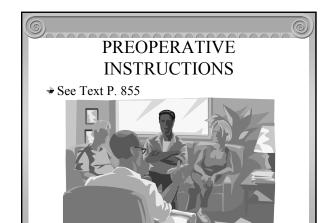
### **Psychosocial Preparation**

- → Assess for anxiety/fear
- → Evaluate non-verbal communication
- → Provide spiritual support
- → Spend time with client
- → Provide divers ional activities
- → Allow family to visit

### (G)

#### Client Educational Needs

- → Review what has been previously taught
- → Deep breathing and coughing
- Leg exercises
- → Incentive Spirometry
- → Turning from side to side
- → Early ambulation
- Obtain feedback of understanding by verbalization or demonstration



### 9

#### Pre-medication

- Sedatives and tranquilizers
- → Narcotic analgesics
- Anticholinergics
- → Histamine-receptor antagonists
- → Neuroleptanalgesics

# ANESTHESIA

- **GENERAL**
- **→**REGIONAL
- **→**CONSCIOUS SEDATION

### (<u>O</u>

#### GENERAL ANESTHESIA

- **→** Loss of sensation **AND consciousness**
- → Acts by blocking awareness center in the brain to cause amnesia, analgesia, hypnosis, and relaxation
- → Route IV or inhalation
- → BE SURE CLIENT WEIGHT IS ON THE CHART!!!!!!

## (G)

#### GENERAL ANESTHESIA

- → Advantages readily able to regulate respiratory and cardiac function can be adjusted to length of operation can be adjusted to age and physical status
- → Disadvantages can depress respiratory and cardiac function

Clients fear loss of control!!!!

#### REGIONAL ANESTHESIA

- →Temporary interruption of transmission of nerve impulses to and from from specific areas of the body. REMAINS CONSCIOUS!!
- ◆Can be topical, local, nerve block, IV block, spinal, or epidural.



#### TOPICAL ANESTHESIA

- → Medication applied to skin or mucus membranes or to open areas of wounds. (surface anesthesia)
- → Most common medication is lidocaine (xylocaine) 4 – 10% or benzocaine
- → Readily absorbed and act rapidly.

#### 9

#### LOCAL ANESTHESIA

- **→** Infiltration of medication
- → Injected into specific areas
- → Used for minor surgery, such as suturing
- → Lidocaine 0.1% with or without epinephrine



#### NERVE BLOCK

- → Inject anesthetic into and around specific nerves or groups of nerves that supply sensation to a small area of the body.
- → Major blocks plexus
- → Minor blocks single nerve



#### **Intravenous Block**

- Known as a Bier block
- Used for arm, wrist, hand procedures
- → Tourniquet used to prevent infiltration and absorption beyond the involved extremity



#### SPINAL ANESTHESIA

- → SAB (subarachnoid block)-lumbar puncture between lumbar disc 2 and sacrum 1
- → Med injected into subarachnoid space
- → Can be low, mid, or high
- → Must lay flat for 8 –12 hours
- → Increase caffeine and fluids to prevent spinal HA



#### **EPIDURAL**

- → Injection of anesthetic into the epidural space
- → Med is inside the spinal column but outside the dura mater



### Conscious Sedation

- → Minimal depression of the level of consciousness in which client retains ability to consciously maintain an airway and respond to verbal and physical stimulation.
- → Increases pain threshold and induces some amnesia.
- → Rapid return to activities of daily living.
- → No driving for 24 hours.



### **Nursing Diagnoses**

- → Risk for aspiration
- → Altered protection
- → Impaired skin integrity
- → Risk for perioperative positioning injury
- → Risk for altered body temperature
- → Altered tissue perfusion
- → Risk for fluid volume deficit or overload



→ Directed at client safety and maintaining homeostasis during the procedure.





#### INTRAOPERATIVE PERIOD

- → Client assessment and identification
- Review diagnostic tests
- → Position client for surgery
- → Perform surgical prep
- Prepare sterile field and monitor environment
- → Open and dispense surgical supplies
- → Manage catheters, tubes, specimens

# INTRAOPERATIVE PERIOD

- → Perform sharps and dressing counts
- → Provide drugs and IV's
- → Document nursing care provided
- → The role of the nurse anesthetist
- → The role of the scrub nurse
- → The role of the circulating nurse



### SKIN PREP

- → Reduce the risk of postoperative wound infection
- → Cleanse, assess, prepare, document.
- → IS SHAVING OF THE AREA NECESSARY????



### **POSITIONING**

- → Optimal visualization of site
- → Optimal access for assessment and maintaining anesthesia and vital functions
- → Protect the client from harm
- → Good body alignment, padding, grounding devices