



**NURSING 121**  
**College Laboratory Guide**  
**Spring 2015**

## PREPARATION FOR COLLEGE LAB:

NRS 121 students are expected to:

1. Review class notes, reading assignments, lab objectives
2. Review assigned skills
3. Go to Pearson's [mynursingkit.com](http://mynursingkit.com), Student Resources, skills: print out the assigned skills for class
4. Be prepared to practice skills assigned with a partner
5. Bring calculator to class for practice of math
6. Attend all scheduled lab sessions
7. **Arrive on time.** Repeated late arrivals will require intervention by the Course Coordinator.

## **REQUIRED TEXTBOOKS:**

Adams, M.L., Holland, L.N. & Urban, C.Q. (2011) *Pharmacology for Nurses A Pathophysiologic Approach*. (3rd ed.) Upper Saddle River: Pearson

King, S. (2009) *Josie's Story A Mother's Inspiring Crusade to Make Health Care Safe*. New York: Grove Press (ISBN-10: 0802119204. Can be obtained on Amazon used for \$10.33. e Textbook is \$9.99 on Amazon. )

North Carolina Custom Edition, (2011). *Nursing Skills for a Concept-Based Approach to Learning*. New York: Pearson Learning Solutions.

North Carolina Concept-Based Learning Editorial Board. (2011). *Nursing A Concept-Based Approach to Learning, Volumes One & Two*. Upper Saddle River: Pearson.

Nugent, P.M., Vitale, B., & Vitale, B.A. (2012) *Test Success: Test Taking Techniques for Beginning Nursing Students*. (6th ed.) Philadelphia: FA Davis.

Pickar, G.D., Abernethy, A.P. (2013) *Dosage Calculations*. (9th ed.) Clifton Park: Thompson Delmar Learning

Silvestri, L.A, (2013) *Comprehensive Review for the NCLEX-RN Examination*. (6th ed.). St. Louis, MI. Elsevier Saunders.

Simple calculator.

## **Recommended Textbooks:**

American Psychological Association. (2010) *Publication Manual of the American Psychological Association*. (6th ed.). American Psychological Association: Washington D.C.

Carpenito-Moyet, L. J., (2008). *Nursing Diagnosis Application to Clinical Practice*. (12<sup>th</sup> ed.). Philadelphia: J. B. Lippincott.

Deglin, J.H., Vallerand, A.H. & Sanoski, C.A. (2011) *Davis's Drug Guide Nurses*. (12th ed.) Philadelphia: FA Davis. (ISBN-13: 978-0-8036-2308-8)

Doenges, M.E., Moorhouse, M.F., Murr, A.C. (2009) *Nursing Care Plans: Guidelines for Individualizing Client Care Across the Life Span*. (8th ed.) Philadelphia: FA Davis. (ISBN-13: 978-0-8036-2210-4)

Nugent, P.M., Vitale, B.A. (2012). *Fundamentals Success*. (3rd ed.) Philadelphia: F.A. Davis.

## College Lab Week 1

### **WEEKLY COURSE OBJECTIVES:**

1. Identify factors and/or co-morbidities affecting and/or contributing to inflammation, infection or oxygenation alterations.
2. Explain commonly used treatments, identified by standards of care, for patients with conditions that affect inflammation, infection, or oxygenation
3. Explain common physical assessment procedures used to assess inflammation, infection or oxygenation for patients across the life span.
4. Outline diagnostic and laboratory test to determine the patient's inflammation, infection or oxygenation status as it relates to the exemplars presented.
5. Explain the management of inflammation, infection, and oxygenation as it relates to health/wellness and prevention.
6. Demonstrate the nursing process in providing culturally competent and caring interventions across the life span for individuals with conditions that affect inflammation, infection and oxygenation.
7. Identify pharmacologic and non-pharmacologic interventions when caring for a patient with conditions that affect inflammation, infection, or oxygenation

### **Inflammation, Infection, Oxygenation EXEMPLARS:**

1. Perioperative care
2. Appendicitis
3. Cholecystitis
4. Peptic Ulcer Disease
5. Cellulitis
6. Pneumonia/ influenza/TB/  
croup

### **COLLEGE LABORATORY EXPERIENCE:**

**DISCUSSION:** will focus on patient centered care, teamwork and collaboration, evidence-based practice, quality improvement and safety &informatics of patients who are experiencing alterations in inflammation, infection and oxygenation.

Students will discuss **Case Scenarios** provided by instructor specific to patients in the perioperative area:

1. Practice assessing patients applying concepts of comfort with simulated surgical procedures involving postoperative pain
2. Practice preop preparation of clients going to surgery
3. Practice preventative nursing care for postoperative patients
4. Practice assessments identifying patients with complications postoperatively
5. Practice assessments identifying patients across the lifespan with alterations of infection and oxygenation
6. Practice preparation of a child and elderly client for surgical experience
7. Identify how to assess and evaluate therapeutic outcomes, and adverse effects of pharmacologic interventions to clients in the perioperative area

## College Lab Week 1 continued

**SKILLS/Demonstration/Practice:** Students will demonstrate competency in assigned skills.

1. hand hygiene,
2. latex precautions,
3. performing surgical hand antisepsis/scrubs,
4. gowning and gloving, preparing surgical site,
5. preparing client for surgery,
6. pouring from a sterile container,
7. preparing a sterile field,
8. preparing for dressing change,
9. changing a sterile dressing,
10. removing sutures,
11. removing staples,
12. applying ace bandages or abdominal binders

### **COLLEGE LABORATORY SKILLS:**

SOURCE: North Carolina Custom Edition, (2011). *Nursing Skills for a Concept-Based Approach to Learning*. New York: Pearson Learning Solutions.

**CONCEPT INFECTION:** Skill 4.1-4.3: p 157-161; 4.12-4.21: p170-182;

**CONCEPT TISSUE INTEGRITY:** Skill 10.1, 10.2, 10.5, 10.7-10.9: p405,408,413, 418-420

**CHARTING:** Students will PRACTICE charting on the perioperative client using SIM CHART

### **DOSAGE CALCULATIONS**

Students will review/practice dosage calculation problems assigned by instructor

SOURCE: Pickar, G.D., Abernethy, A.P. (2013) *Dosage Calculations*. (9th ed.) Clifton Park: Thompson Delmar Learning

DOSAGE CALCULATION TEST GIVEN IN CLASS THE FIRST DAY COVERS THE FOLLOWING TOPICS

1. Question #1: Converting From one Unit to Another Using the Conversion Factor Method: Pickar p75, Converting within the metric system using the conversion factor method shortcut: Pickar p79, Converting between systems of measurement using the conversion factor method: Pickar p84-85, Practice conversion problems Pickar p 88-89
2. Question #2: Interpreting The Drug order Pickar p 117-132
3. Question #3: Reading Drug Labels Pickar p 133-147
4. Question #4: Oral Dosage of Drugs: Pickar p 171-204
5. Question #5: Injectables including insulin: Pickar p205-240
6. Question #6: Reconstitution of solutions: Pickar p241-284
7. Question #7: Converting pounds to kilograms: Pickar p310-352
8. Question #8: Intravenous solutions calculations of ml/hour and infusion time: Pickar p 355-402
9. Question #9: Intravenous solutions calculations of gtt/min: Pickar p 355-402
10. Question #10: Intravenous solutions calculation of IV antibiotic rate on an infusion pump: Pickar p 355-402

## College Lab week 1 continued

**Practice NCLEX test questions** related to the perioperative client, and alterations of the concept of infection and oxygenation. Exemplars:

1. Perioperative care
2. Appendicitis
3. Cholecystitis
4. Peptic Ulcer Disease
5. Cellulitis
6. Pneumonia/ influenza/TB/croup

Students will learn how to break down NCLEX test questions, identify what the question is asking, how to use test taking strategies to answer the questions.

### **Week 1 NRS 121 Math Review:**

1. The patient is ordered to have Synthroid 0.05mg orally daily at 7a.  
On hand: Synthroid 0.025mg tablets. How many tablets should you give this patient?
  
2. The physician orders erythromycin 400 mg orally for an adult patient with pneumonia. The medication label reads: erythromycin 200mg/5mL. Calculate the dose to be given to the patient?
  
3. A patient is ordered to receive Benadryl 50 mg orally x 1 dose. The multi-dose vial is labeled: Benadryl 12.5 mg/5mL. Calculate the dose to be given.

4. The physician orders the patient with deep vein thrombosis to receive heparin 7,000 units subQ q12hr. The heparin available to you consists of 5,000U/mL. Calculate the dose to be given to the patient.

5. Calculate the rate of infusion for a 1000 mL D5  $\frac{1}{2}$  NS over 8 hours.(15gtts/mL)

6. Calculate the rate of infusion of Decadron 12 mg in 50 mL NS over a half an hour. (Drip factor = 15). Calculate the dose to be administered

7. A 46 lb 4-year old patient is ordered to have acetaminophen 10 mg/kg/dose oral suspension. Medication bottle is labeled: 300 mg / 2 mL. Calculate the dose to be administered.

## College Lab Week 2

### **WEEKLY COURSE OBJECTIVES:**

1. Explain commonly used treatments, identified by standards of care, for patients with conditions that affect metabolism and mobility.
2. Explain common physical assessment procedures used to assess metabolism and mobility for patients across the life span.
3. Outline diagnostic and laboratory test to determine the patient's metabolism and mobility status as it relates to the exemplars presented.  
Explain the management of metabolism and mobility as it relates to health/wellness and prevention.
4. Demonstrate the nursing process in providing culturally competent and caring interventions across the life span for individuals with conditions that affect metabolism and mobility.
5. Identify pharmacologic and non-pharmacologic interventions when caring for a patient with conditions that affect metabolism and mobility.

### **Metabolism and Mobility Exemplars:**

1. osteoporosis
2. osteoarthritis
3. fractures
4. scoliosis
5. amputation

**DISCUSSION:** will focus on patient centered care, teamwork and collaboration, evidence-based practice, quality improvement and safety &informatics of patients who are experiencing alterations metabolism and mobility.

Students will **discuss Case Scenarios** given by the instructor specific to patients with alterations metabolism and mobility.

1. Be able to identify risk factors for development of osteoporosis by interviewing simulated patients.
2. Be able to teach a simulated patient with osteoporosis how to manage medications, how to prevent fractures
3. Be able to teach a simulated patient with osteoarthritis how to manage pain, maintain function, maintain mobility
4. Be able to assess for compartment syndrome, osteomyelitis, fat emboli for a simulated patient with a fracture
5. Be able to assess for complications for a patient who has had a spinal instrumentation for scoliosis
6. Be able to teach a family member discharge care for a patient with scoliosis following surgical correction
7. Be able to differentiate between phantom limb pain and incisional pain in a simulated patient following amputation.
8. Be able to provide wrapping of an amputation stump to promote shrinking
9. Be able to identify therapeutic outcomes for patients with alterations of metabolism and mobility.

**COLLEGE LABORATORY SKILLS:**

SOURCE: North Carolina Custom Edition, (2011). *Nursing Skills for a Concept-Based Approach to Learning*. New York: Pearson Learning Solutions.

MOBILITY: Practice dangling, use of sliding board for transfer,

**MOBILITY SKILL REVIEW:** 6.9-6.10: p232-238;

NEW Skill 6.11 p237

**SKILLS:**

1. **transferring from bed to wheelchair,**
2. continuous passive motion device,
3. cast care for child and adult (leg, arm, shoulder); spica: hip spica;
4. **traction skin traction** (Dunlop, **Bucks**, Russells), balanced, **skeletal**, external fixation, halo, cervical traction.

**PRACTICE:**

1. Assessment and care for a client with an amputation. Be able to wrap an ace bandage around stump.
2. Simulation of patient who has complications of fracture reduction include teaching plan
3. Practice transfer of a patient from bed to wheelchair with a fracture that is casted
4. Identify nursing assessments of a simulated patient in traction
5. Practice developmental appropriate care for a simulated child and elderly patient with alteration of mobility

**PRACTICE** charting using SIM CHART of a client with compartment syndrome

**PRACTICE** Dosage Calculations

1. Converting From one Unit to Another Using the Conversion Factor Method: Pickar p75, Converting within the metric system using the conversion factor method shortcut: Pickar p79, Converting between systems of measurement using the conversion factor method: Pickar p84-85, Practice conversion problems Pickar p 88-89
2. Interpreting The Drug order Pickar p 117-132
3. Reading Drug Labels Pickar p 133-147



## **Week 2 NRS 121 Math Review**

### **Practice Medication Dosage Calculations:**

1. Order reads: Kefzol 350 mg in 100 mL D5W to run in 60 mins.  
Drop factor: 15gtts/mL. Calculate the flow rate. Show all math.
  
2. Order: Heparin 20,000U in 1,000mL Sodium Chloride 0.9% to infuse at 1,000U per hr via IV pump. Calculate the flow rate. Show all math.
  
3. Order: Heparin 2,500 U per hr via IV pump from Heparin 50,000U in 1,000mL D5W.  
Calculate the flow rate. Show all math.
  
4. Cleocin Pediatric 8 mg per kg per day in four divided doses orally.  
Label reads: Clindamycin (Cleocin) Pediatric 75 mg per 5 mL.  
Child's weight = 84 lbs.  
Calculate the dose. Show all math.
  
5. Biaxin oral suspension 15 mg/kg/day in two divided doses orally.  
Label reads: Clarithromycin (Biaxin) oral suspension 125 mg/5 mL  
Child's weight 38 lb.  
Calculate dose. Show all math.

6.. On hand: chlorpromazine (Thorazine) 25 mg/mL  
Order reads: Thorazine 15 mg IM.

7. Diazepam (Valium) 2 mg IV push. Label: Diazepam 10 mg/2mL

8. Order: Vitamin K 20 mg IM  
Label: Vitamin K 25 mg per 2.5mL

9. Order: Isoniazid Injection 5mg/kg/day IM to an adult weighing 128 lbs.  
Label: Isoniazid Injection 100 mg per mL.  
Calculate dose. Show all math.

10. Epogen 75 Units per kg subcutaneously to an adult weighing 140 lb.  
Label reads: Epogen 2,000U/mL. Calculate dose. Show all math.

**PRACTICE NCLEX STYLE QUESTIONS** related to the perioperative patients, and patients with alterations of mobility and metabolism for the following Exemplars:

1. osteoporosis
2. osteoarthritis
3. fractures
4. scoliosis
5. amputation

Students will learn how to break down NCLEX test questions, identify what the question is asking, how to use test taking strategies to answer the questions.

## College lab week 3

### **WEEKLY COURSE OBJECTIVES:**

1. Identify factors and/or co-morbidities affecting and/or contributing to alterations in immunity.
2. Explain commonly used treatments, identified by standards of care, for patients with conditions that affect immunity.
3. Explain common physical assessment procedures used to assess immunity for patients across the life span.
4. Outline diagnostic and laboratory test to determine the patient's immune status as it relates to the exemplars presented.
5. Explain the management of immunity as it relates to health/wellness and prevention.
6. Demonstrate the nursing process in providing culturally competent and caring interventions across the life span for individuals with conditions that affect immunity.
7. Identify pharmacologic and non-pharmacologic interventions when caring for a patient with conditions that affect immunity.

### **Immunity Exemplar:**

1. gouty arthritis
2. rheumatoid arthritis

**DISCUSSION:** will focus on patient centered care, teamwork and collaboration, evidence-based practice, quality improvement and safety & informatics of patients who are experiencing alterations of immunity.

Students will discuss Case Scenarios given by the instructor specific to patients with alterations immunity.

1. Student will practice with a simulated patient with gouty arthritis therapeutic outcomes for medication and dietary management
2. Student will implement a teaching plan for a simulated patient with rheumatoid arthritis on how to manage pharmacologic interventions
3. Student will teach a simulated patient how to maintain function with rheumatoid arthritis/arthritis

### **COLLEGE LABORATORY SKILLS:**

SOURCE: North Carolina Custom Edition, (2011). *Nursing Skills for a Concept-Based Approach to Learning*. New York: Pearson Learning Solutions.

ELIMINATION SKILL: 2.10-2.17: p46-64

### **ELIMINATION:**

postoperative elimination care for surgical clients with alterations in mobility

1. urinary catheterization,
2. bladder irrigation,
3. continuous bladder irrigation,
4. suprapubic catheter care,
5. urinary ostomy care,
6. urinary diversion,
7. specimen from ileal conduit

**PRACTICE** charting using SIM CHART for clients with elimination needs and alterations of mobility and immunity

**PRACTICE** Dosage Calculations

1. Oral Dosage of Drugs: Pickar p 171-204
2. Injectables including insulin: Pickar p205-240
3. Reconstitution of solutions: Pickar p241-284

**Week 3 NRS 121 Math Review**

1. Order: Cleocin Pediatric 8 mg per kg per day in four divided doses orally.  
Label reads: Clindamycin (Cleocin) Pediatric 75 mg per 5 mL.  
Child's weight = 84 lbs.  
Calculate the dose. Show all math.

2. 200 mL of 50% betadine solution using stock betadine and NS

\_\_\_\_\_ mL stock betadine solution          \_\_\_\_\_ mL NS

3. *Kefzol 150 mg IM q.8h*

Reconstitute with \_\_\_\_\_ mL diluent for a total solution volume of \_\_\_\_\_ mL with a concentration of \_\_\_\_\_ mg/mL.

Give: \_\_\_\_\_ mL



4. An order reads Oxacillin Sodium 500 mg in 100 mL NS over 30 minutes q8h every 6 hrs. What is the rate of infusion?

5. The order reads 1000 ml Normal Saline to infuse over 8 hours. The set has a drip factor or 15 gtt/ml. What should the drip rate be?

6. A client is to receive 150 ml of an IV Gentamicin solution over 45 mins. Infusion pump rate? The set has a drip factor of 10 gtt/ml. What should the drip rate be?

7. Order: Augmentin 375 mg p.o. q.8h

Supply: 75 mL bottle of reconstituted Augmentin, 250 mg/5 mL

Give: \_\_\_\_\_ mL

8. The physician has ordered to administer Ampicillin 1 ml every 6 hours. Ampicillin 2.5 Gm per 10 ml is available. How many mg will you administer?

9. Order: morphine sulfate 6 mg IM q.4h p.r.n., pain

Supply: morphine sulfate 10 mg/mL

Give: \_\_\_\_\_ mL

10.

Order: diazepam 5 mg IM q.4h p.r.n., anxiety

Supply: Valium (diazepam) 10 mg per 2 mL

Give: \_\_\_\_\_ mL

**PRACTICE NCLEX STYLE QUESTIONS** related to patients with alterations of immunity for the following Exemplars:

1. gouty arthritis
2. rheumatoid arthritis

Students will learn how to break down NCLEX test questions, identify what the question is asking, how to use test taking strategies to answer the questions.

# College Lab Week 4

## **WEEKLY COURSE OBJECTIVES**

1. Identify factors and/or co-morbidities affecting and/or contributing to alterations in immunity.
2. Explain commonly used treatments, identified by standards of care, for patients with conditions that affect immunity.
3. Explain common physical assessment procedures used to assess immunity for patients across the life span.
4. Outline diagnostic and laboratory test to determine the patient's immune status as it relates to the exemplars presented.
5. Explain the management of immunity as it relates to health/wellness and prevention.
6. Demonstrate the nursing process in providing culturally competent and caring interventions across the life span for individuals with conditions that affect immunity.
7. Identify pharmacologic and non-pharmacologic interventions when caring for a patient with conditions that affect immunity.

## **Immunity EXEMPLARS:**

1. HIV (not AIDS)
2. SLE
3. Hypersensitivity

**DISCUSSION:** will focus on patient centered care, teamwork and collaboration, evidence-based practice, quality improvement and safety & informatics of patients who are experiencing alterations of immunity.

Students will discuss Case Scenarios given by the instructor specific to patients with alterations immunity.

1. Identify therapeutic outcomes for simulated patients with HIV specific to pharmacologic interventions and laboratory assessments
2. Simulate teaching of an adolescent patient on how to practice safe sex.
3. Correlate symptoms experienced by patient experiencing hypersensitivity and pharmacologic interventions
4. Identify priority interventions for patient experiencing hypersensitivity
5. Identify how to assess alterations of systems with a patient with Systemic Lupus Erythematosus

## **COLLEGE LABORATORY:**

Simulation patient situations incorporating review of all skills learned applied to patients with alterations of inflammation, infection, mobility, or immunity.

**PRACTICE** charting using SIM CHART based on simulation of patient with alterations of inflammation, infection, mobility, or immunity.

## College Lab week 4 continued

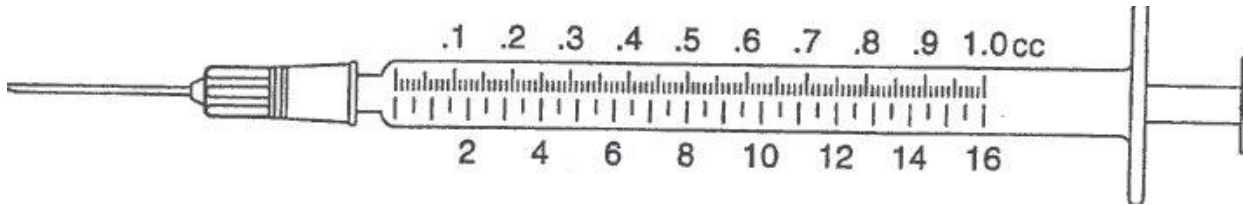
### PRACTICE Dosage Calculations

1. Converting pounds to kilograms: Pickar p310-352
2. Intravenous solutions calculations of ml/hour and infusion time: Pickar p 355-402
3. Intravenous solutions calculations of gtts/min: Pickar p 355-402
4. Intravenous solutions calculation of IV antibiotic rate on an infusion pump: Pickar p 355-402

### **NRS 121 Practice Math Week 4**

1. A client is ordered 50 milligrams of Amoxicillin trihydrate orally. 125 milligrams in 5 milliliters of Syrup is available. How many milliliters will you administer?
  
2. A client is ordered 200 milligrams of Augmentin intravenously. 600 milligrams in 6 milliliters of liquid for IV Injection is available. How many milliliters will you administer?
  
3. A client is ordered 22 milligrams of Gentamicin by IV secondary set. 20 milligrams in 2 milliliters of liquid for IM Injection is available. How many milliliters will you administer you add to the 100 mL bag of NS for infusion?
  
4. One liter of Dextrose 5% in water is charted over 8 hours. The drop factor is 10. Calculate the number of drops per minute.
  
5. Ordered 1000 mL D5W IV to infuse in 10 hours by infusion pump.

6. Order: Heparin 3000 units subq twice daily Supply: Heparin 10,000 units in a 2 ml vial  
Give:           ml.    Indicate this amount on the syringe:



7. Ancef 1Gm in 50 ml of fluid over 1/2 hour on an infusion pump.

8. 500 mg of Ampicillin solution is ordered; available solution contains 125 mg/5mL. How much will you give?

9. Metronidazole (Flagyl) 0.25g is ordered IV piggyback. Available solution contains 50mg per ml. How many mL's will you add to the 100 mL bag of NS?

10. Motrin 0.6g is ordered; available tablets contain 600 mg. How many tablets will you give?

**PRACTICE NCLEX STYLE QUESTIONS:** related to patients with alterations of immunity for the following Exemplars:

**Immunity EXEMPLAR:**

1. HIV (not AIDS)
2. SLE
3. Hypersensitivity

Students will learn how to break down NCLEX test questions, identify what the question is asking, how to use test taking strategies to answer the questions.



### Simulation – Care of the Postoperative Patient with Complication

Students will be guided through the simulation by faculty. Information will be provided via power point. Students are expected to assess the patient, provide the patient care ordered, and discuss the rationale for nursing actions.

Name: Susan Smith

Gender: Female

Age: 72      Weight: 255 pounds /110Kg      Height: 63 inches

Allergy – None

Primary Care Physician – Dr. Jane Neighborly

Attending Surgeon – Dr. John Stapler

Medical History-

Diverticular disease (diagnosed 2006)

Osteoarthritis (diagnosed 2010)

Obesity

Diabetes type II (diagnosed 2005).

No history of tobacco use

No alcohol

**Medications on admission-**

Januvia (Sitagliptin) 100mg by mouth daily

Metformin (Glucophage) 850mg by mouth twice a day. Take with food at mealtime.

Tylenol 650mg by mouth every 4 hours as needed for pain. Not to exceed cumulative dose of 4grams per day.

**Social History** – Retired lawyer. Lives in local community with her husband, two adult children live in large city nearby.

**History of Present Illness** – Mrs. Smith consented to elective surgical bowel resection and anastomosis due to increasing frequency of diverticulitis symptoms. Since receiving the original diagnosis, she has followed a diet modification plan to keep her diabetes and diverticulitis well controlled. Over the past year she has had three flare ups of diverticulitis that have responded to antibiotics treatment.

### **Scenario**

At change of shift the nurse reports that Mrs. Smith, now three days post-op, is progressing well without any complaints, vital signs are normal and lungs are clear to auscultation. Yesterday her surgical drain was removed by the surgeon. She has progressed to a clear liquid diet and may be out of bed to the chair. Due to her arthritis she will use a walker to assist with post operative ambulation.

Post –op Pain medications are as follows

Morphine Sulfate 10mg IM every 4 hours for severe pain

Percocet 5mg/325mg by mouth every 4-6 hours for moderate pain. **Last dose given 3.5 hours ago.**

Acetaminophen 650mg by mouth every four hours as needed for mild pain.

See next page for lab data.

Before making rounds you review the latest lab results for Mrs. Smith-

Test	Result	Units	Ref. Range
Sodium	144	mEq./L.	135-147
Potassium	4.6	mEq./L.	3.30-5.50
Chloride	110	mEq./L.	98-112
Co2	31	mEq./L.	21-31
Calcium	9.1	mEq./L.	8.0 – 10.2
Glucose	168 <b>H</b>	mg./dl	70-115
Creatinine	1.4	mEq./L.	0.6 -1.5
PO4	2.7	mg./dl	2.4-4.5

Test	Result	Units	Ref. Range
WBC	11	K/cmm	4.5 - 11
RBC	3.0 <b>L</b>	M/cmm	3.4 – 5.4
HGB	9.0 <b>L</b>	Gm/dl	11.5 - 16
HCT	31 <b>L</b>	%	34 - 47
MCV	83	Fl	80 - 95
Platelet	241	K/cmm	140 - 450

## Process Check

At change of shift report Ms. Smith is progressing well after surgery and is in stable condition.

- Identify 3 factors this patient has for post operative complications?
- When you assess the patient, name 3 significant post operative complications you are concerned about encountering.
- Review the results of this morning's lab values to identify 3 lab values that cause a nurse to have concerns that the patient's condition might change. (Elevated WBC and glucose. Low RBC, HGB and HCT)
- Percocet contains acetaminophen.

What is the daily maximum dose of acetaminophen?

What is the side effect of too much acetaminophen?

When you greet the patient she is sitting in the chair. Encourage the patient to do coughing and deep breathing.

Patient uses call bell to get assistance back to bed with walker. Assist the patient to correctly get up from the chair and use walker to return to bed.

Note she is walking slowly with short steps – Assess Pain.

She reports a pain scale of 6 out of ten while ambulating and requests medication for severe pain before you change her dressing. She has sharp abdominal pain. You assist her return to bed. It is now 4 hours since her last dose of pain medication.

Administer 10mg of Morphine IM

After waiting a *notional* 20 minutes –

Gather supplies to change surgical dressing –Gloves, clean and sterile, 4x4 sterile gauze, Sterile ABD pad, surgical tape.

Don clean gloves, remove dressing.

Wound is inspected. Increased inflammation and drainage noted. Two staples in middle of eight staples are pulled away from medial edge of incision. Bowel loop is visible inside open incision.

- **Assess and Nursing Actions – Name top 3 priorities**

- Call for assistance - Delegation to second nurse - Name Two Tasks

Current Vital signs - Temp 99.8 F, Pulse 96, Respirations 22, BP 144/86

Pulse Oximetry 99% on room air.

Finger-stick glucometer -190

Physician in to see patient – confirms dehiscence and evisceration, plans to return patient to operating room. See STAT orders.

### **STAT Pre-op orders**

NPO

Insert indwelling Foley catheter stat

Begin IV of Normal Saline 125ml per hour

A 1000ml bag of Normal Saline Solution is obtained with IV tubing that delivers a drip rate of 15 gtts/ml. Calculate the IV drip rate

Administer Ceftriaxone 1 gm in 100ml over 30 minutes using IV tubing delivers a drip rate of 15 gtts/ml. Calculate the IV drip rate

Transfer IV fluids to Medication Pump

What is the correct amount and rate of fluid administration for the main IV?

What is the correct amount and rate of fluid per hour for the antibiotic dose?

What orders are completed first, list order beginning with #1 the highest priority.

**Ms. Smith is successfully prepared for surgical repair of abdominal wound dehiscence.**

**She leaves your care alert and oriented, transported on a stretcher to the operating room in stable condition.**

### **Debriefing**

What risk factors for wound dehiscence did this patient have?

What complications could follow a wound dehiscence?

Why is a wound culture swab for culture and sensitivity obtained before administration of antibiotics?

Why is Ceftriaxone administered before surgery?

Why is a Foley Catheter inserted before surgery?

Do elderly patients exhibit differences in febrile reactions to infection?

How does an infection influence a diabetic's glucose reading?

**Week 5 – No College Lab  
Review for Final Exam**