Sample Assignment for: CLINICAL DECISION MAKING

Case Studies in Medical-Surgical Nursing

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ISBN-10: 1-4180-4085-1
©2007, 288 pp, 8 1/2 x 11
Softcover, 2-Color

SAMPLE ASSIGNMENT FOR A PHARMACOLOGY CASE STUDY

Prior to lab, have all students read the case study about Mr. Mendes and answer all of the questions. During the lab period, divide the students into small groups. Assign each group the task of developing at least four pertinent questions and the translations for those questions. Students should translate from English to the foreign language commonly encountered in the region where the health care facility providing clinical experience for the students is located. These translations should include terms nurses routinely use when assessing and communicating with clients. For instance, assessing the client’s pain level hourly is required by many accrediting agencies. One group might be assigned to translate questions such as “Are you having pain?” “Where is your pain?” “On a scale of one to ten, what is your pain level?” Another group may be assigned to develop and translate questions concerning the client’s intake and output. Learning tools the students may use include the campus library, computers with internet access, and foreign language faculty on campus.

Additional cases provide the opportunity to address a wide variety of medical-surgical conditions and the standards of care for these conditions. The focus of the case studies is to stimulate critical thinking on the part of the reader. Understanding the nursing implications and why these are so important to the health and welfare of the clients is a thread throughout the case studies as well as the depth of knowledge nurses must have related to pharmacological and adjunctive therapies used in the treatment of medical-surgical health alterations.
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Reviewers

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Preface

Delmar Learning’s Case Studies Series was created to encourage nurses to bridge the gap between content knowledge and clinical application. The products within the series represent the most innovative and comprehensive approach to nursing case studies ever developed. Each title has been authored by experienced nurse educators and clinicians who understand the complexity of nursing practice, as well as the challenges of teaching and learning. All the cases are based on real-life clinical scenarios and demand thought and “action” from the nurse. Each case brings the user into the clinical setting and invites her to utilize the nursing process while considering all the variables that influence the client’s condition and the care to be provided. Each case also represents a unique set of variables, to offer a breadth of learning experiences and to capture the reality of nursing practice. To gauge the progression of a user’s knowledge and critical thinking ability, the cases have been categorized by difficulty level. Every section begins with basic cases and proceeds to more advanced scenarios, thereby presenting opportunities for learning and practice for both students and professionals.

All the cases have been reviewed by experts to ensure that as many variables as possible are represented in a truly realistic manner and that each case reflects consistency with realities of modern nursing practice.

“[This text’s] strength is the large variety of case studies—it seemed to be all inclusive. Another strength is the extensiveness built into each case study. You can almost see this person as they enter the ED because of the descriptions that are given.”

—MARY BETH KIEFNER, R.N., M.S.,
Nursing Program Director/Nursing Faculty,
Illinois Central College

“The cases . . . reflect the complexity of nursing practice. They are an excellent way to refine critical-thinking skills.”

—DARLA R. URA, MA, RN, APRN, BC,
Clinical Associate Professor, Adult and Elder
Health Department, School of Nursing,
Emory University

“The case studies are very comprehensive and allow the undergraduate student an opportunity to apply knowledge gained in the classroom to a potentially real clinical situation.”

—TAMELLA LIVENGOOD, APRN, BC, MSN, FNP,
Nursing Faculty, Northwestern Michigan College

“These cases and how you have approached them definitely stimulate the students to use critical-thinking skills. I thought the questions asked really pushed the students to think deeply and thoroughly.”

—JOANNE SOLCHANY, PhD, ARNP, RN, CS,
Assistant Professor, Family & Child Nursing,
University of Washington, Seattle
“The use of case studies is pedagogically sound and very appealing to students and instructors. I think that some instructors avoid them because of the challenge of case development. You have provided the material for them.”

—Nancy L. Oldenburg, RN, MS, CPNP, Clinical Instructor, Northern Illinois University

“[The author] has done an excellent job of assisting students to engage in critical thinking. I am very impressed with the cases, questions, and content. I rarely ask that students buy more than one . . . book . . . but, in this instance, I can’t wait until this book is published.”

—Deborah J. Persell, MSN, RN, CPNP, Assistant Professor, Arkansas State University

“This is a groundbreaking book. . . . This book should be a required text for all undergraduate and graduate nursing programs and should be well-received by faculty.”

—Jane H. Barnsteiner, PhD, RN, FAAN, Professor of Pediatric Nursing, University of Pennsylvania School of Nursing

How to Use This Book

Every case begins with a table of variables that is encountered in practice, and that must be understood by the nurse in order to provide appropriate care to the client. Categories of variables include age, gender, setting, culture, ethnicity, cultural considerations, preexisting conditions, coexisting conditions, communication considerations, disability considerations, socioeconomic considerations, spiritual considerations, pharmacological considerations, psychosocial considerations, legal considerations, ethical considerations, alternative therapy, prioritization considerations, and delegation considerations. If a case involves a variable that is considered to have a significant impact on care, the specific variable is included in the table. This allows the user an “at a glance” view of the issues that will need to be considered to provide care to the client in the scenario. The table of variables is followed by a presentation of the case, including the history of the client, current condition, clinical setting, and professionals involved. A series of questions follows each case that require the user to consider how she would handle the issues presented within the scenario. Suggested answers and rationales are provided in the accompanying Instructor’s Manual (ISBN: 1-4180-4086-X) for remediation and discussion.

Organization

Cases are grouped according to body system. Within each part, cases are organized by difficulty level from easy, to moderate, to difficult. This classification is somewhat subjective, but it is based upon a developed standard. In general, the difficulty level has been determined by the number of variables that impact the case and the complexity of the client’s condition. Colored tabs are used to allow the user to distinguish the difficulty levels more easily. A comprehensive table of variables is also provided for reference to allow the user to quickly select cases containing a particular variable of care.

While every effort has been made to group cases into the most applicable body system, the scope of many of the cases may include more than one body system. In such instances, the case will still only appear in the section for one of the body systems addressed. The cases are fictitious; however, they are based on actual problems and/or situations the nurse will encounter. Any resemblance to actual cases or individuals is coincidental.
Acknowledgments

Foremost, I would like to thank Libby Howe, Product Manager, whose guidance, encouragement, and support throughout the duration of this project is beyond measure. I am grateful to the hardworking team of Libby, Matt Kane, Director of Learning Solutions, and Tamara Caruso, Acquisitions Editor, for the opportunity to be involved in the Case Study Series. Many thanks to those individuals who willingly shared their personal stories so future nurses could learn from them. The input from students, friends, and family was invaluable, especially the generosity of Kimberly Dodd, MD, whose contributions and support exemplify friendship and professional collaboration. With great appreciation, I wish to acknowledge the reviewers for the constructive comments and suggestions that helped to enhance the educational value of each case.

About the Author

Gina M. Ankner, RN, MSN, ANP-C, BC, earned her bachelors and masters degrees in nursing from Boston College. She began her nursing career on a cardiac telemetry unit working as a collegiate nurse intern while earning her bachelors degree and as a registered nurse for several years. In 1995, she was a research coordinator in the department of maternal-fetal medicine at Women & Infants’ Hospital of Rhode Island where she currently works per diem in women’s primary care. In 1997 she joined the College of Nursing faculty at the University of Massachusetts Dartmouth.

She has presented in a variety of venues on topics related to college health and the use of date rape and recreational drugs. Most recently, Gina presented a series of workshops in Southeastern Massachusetts titled The Clinical Nurse Instructor Role: Charting a Course for Success. Sponsored by a Nursing Career Ladder Initiative (NUCLI) grant, the workshops provided an understanding of the role of a clinical instructor and strategies for success. She is the principal lecturer, a clinical instructor, and the course and lab coordinator for the fundamentals of nursing course. Her teaching responsibilities also include clinical instruction in medical-surgical nursing.

Note from the Author

My students are the inspiration for this book. With rare exception, each case study is based on a client that a student has cared for. Through the student’s eyes, I share stories of men and women who have turned to their nurses for care and support during their illness. Perhaps when reading a scenario, you will think, “It would not happen like that.” Please know that it did and that it will. The most enjoyable part of writing each case was the realization that another nursing student will learn from the experience of a peer. The intent was not only to provide the more common patient scenarios, but also to present actual cases that encourage critical thinking and prompt a student to ask “what if?”

The wonderful thing about a case study—that possibilities for learning abound! These cases provide a foundation upon which endless knowledge can be built. So sit down, read a good story, be creative—change a client’s gender, age, or ethnicity, pose new questions, but, most importantly, enjoy the journey of becoming a better nurse.

The author welcomes comments via e-mail at MedSurgCases@yahoo.com.
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Mr. Lourde

**Case Study 3**

**Gender:** Male  
**Age:** 73  
**Setting:** Hospital  
**Ethnicity:** White American

**Preexisting Condition:**  
- Left hip replacement two years ago. Septic shock with left hip osteomyelitis last year with subsequent removal of the hip replacement prosthesis. 
- Allergies to meperidine hydrochloride (Demerol), morphine sulfate (MS Contin), and vancomycin hydrochloride (Vancocin).

**Communication**

**Disability**

**Socioeconomic**

**Spiritual/Religious**

**Pharmacologic**  
- Linezolid (Zyvox), fondaparinux (Arixtra), hydrocodone bitartrate/acetaminophen (Vicodin), acetaminophen (Tylenol), docusate sodium (Colace)

**Legal**

**Ethical**

**Alternative Therapy**

**Prioritization**

**Delegation**

**The Skeletal System**

**Level of difficulty:** Moderate  
**Overview:** This case requires that the nurse understand the risk associated with postoperative wound infection following a hip replacement. The manifestations characteristic of osteomyelitis are discussed. The nurse must care for the surgical incision site with a daily dressing change and maintenance of a HemoVac drainage system. The client's prescribed medications are reviewed for purpose and potential adverse effects. The purpose and potential complications of a peripherally inserted central catheter (PICC) are explained.
Case Studies

Product Sampler

Sample Case Study

Client Profile

**Mr. Lourde** is a 73-year-old man whose wife noticed a lump on his left hip that has increased in size over the past two weeks. The skin around the lump is red and swollen. Mr. Lourde complains of increasing discomfort in his left hip. His wife became concerned when he felt warm and his temperature was 101°F (38.3°C) so she brought him to the hospital. Mr. Lourde is diagnosed with an abscess of his left hip. A needle aspiration of the abscess reveals 30 cc of purulent exudate. Mr. Lourde is admitted for surgical incision and drainage of a suspected recurrence of osteomyelitis and for intravenous antibiotic therapy.

Case Study

A surgical incision and drainage is performed to remove necrotic tissue, sequestrum, and surrounding granulation tissue. A bacterial infection is identified as *Enterococcus faecalis*. The nurse reviews the client’s kardex and notes the dressing change prescribed is a dry sterile dressing to the left hip daily with reinforcement as needed.

The nurse medicates Mr. Lourde with hydrocodone/acetaminophen (Vicodin) thirty minutes prior to the dressing change. While changing the hip dressing, the nurse notes there are seven intact sutures along the incision line, and a HemoVac drain is in place. Minimal drainage is noted at the incision site. The site is slightly swollen, but there are no signs of infection. The HemoVac has drained 30 cc of dark red blood. Mr. Lourde tolerates the dressing change with minimal discomfort. He is afebrile at 98°F (36.7°C).

Questions

1. Discuss the time frame within which signs of an infection at the site of a hip replacement usually occur. What possible complications are of concern when a client develops an infection at the site of a hip replacement?

2. Discuss the pathophysiology of osteomyelitis. Include an explanation of a sequestrum, involucrum, and Brodie’s abscess.

3. Discuss the clinical manifestations of osteomyelitis.
Questions (continued)

4. The health care provider suspects a recurrence of Mr. Lourde's osteomyelitis. How will the health care provider confirm this diagnosis?

5. Discuss the treatment options if Mr. Lourde has osteomyelitis of his left hip.

6. Mr. Lourde will require at least three to eight weeks of high-dose intravenous antibiotic therapy. The health care provider has requested that a PICC be inserted. Explain what a PICC is and the potential complications associated with this device.

7. What information should be included in the nurse's documentation of the dressing change?

8. Explain why the nurse does not document the stage of the left hip wound.

9. Write two expected outcomes for the duration of time that a HemoVac drainage reservoir system is in place. How often should the nurse empty the drain and how will the nurse ensure that the system is working correctly to drain the incision site?

10. Each of the medications below is prescribed for Mr. Lourde. For each, provide the therapeutic drug classification and discuss the purpose of the medication for Mr. Lourde and potential adverse effect(s) that the nurse should monitor.

   1. Linezolid (Zyvox)
   2. Fondaparinux (Arixtra)
   3. Hydrocodone bitartrate/acetaminophen (Vicodin)
   4. Acetaminophen (Tylenol)
   5. Docusate sodium (Colace)

11. Help the nurse generate three appropriate nursing diagnoses for Mr. Lourde.
Case Studies

Product Sampler

Answers to Sample Case Study

Client Profile

Mr. Lourde is a 73-year-old man whose wife noticed a lump on his left hip that has increased in size over the past two weeks. The skin around the lump is red and swollen. Mr. Lourde complains of increasing discomfort in his left hip. His wife became concerned when he felt warm and his temperature was 101°F (38.3°C) so she brought him to the hospital. Mr. Lourde is diagnosed with an abscess of his left hip. A needle aspiration of the abscess reveals 30 cc of purulent exudate. Mr. Lourde is admitted for surgical incision and drainage of a suspected recurrence of osteomyelitis and for intravenous antibiotic therapy.

Case Study

A surgical incision and drainage is performed to remove necrotic tissue, sequestrum, and surrounding granulation tissue. A bacterial infection is identified as *Enterococcus faecalis*. The nurse reviews the client’s kardex and notes the dressing change prescribed is a dry sterile dressing to the left hip daily with reinforcement as needed. The nurse medicates Mr. Lourde with hydrocodone/acetaminophen (Vicodin) thirty minutes prior to the dressing change. While changing the hip dressing, the nurse notes there are seven intact sutures along the incision line, and a HemoVac drain is in place. Minimal drainage is noted at the incision site. The site is slightly swollen, but there are no signs of infection. The HemoVac has drained 30 cc of dark red blood. Mr. Lourde tolerates the dressing change with minimal discomfort. He is afebrile at 98°F (36.7°C).

Questions and Suggested Answers

1. Discuss the time frame within which signs of an infection at the site of a hip replacement usually occur. What possible complications are of concern when a client develops an infection at the site of a hip replacement?

   Postoperative wound infections usually occur within thirty days following surgery. If an implant has been used, deep infections (involving the tissue beneath deep fascia) may occur up to a year after surgery. Infection following a total hip replacement is of concern since it may lead to the development of osteomyelitis.

   Prompt recognition of osteomyelitis and initiation of treatment is critical. Inadequate or delayed treatment can result in necrotic bone, further microorganism growth, and may lead to chronic osteomyelitis.
Necrotic bone is the distinguishing feature of chronic osteomyelitis, which may result in bone deformity, loss of function, recurrent injury, amputation, or even death (Roberts & Lappe, 2005; Marek, 2007; Smeltzer & Bare, 2004).

2. Discuss the pathophysiology of osteomyelitis. Include an explanation of a sequestrum, involucrum, and Brodie’s abscess. The pathological mechanisms of osteomyelitis are inflammation and destruction of bone, bone necrosis, and formation of new bone. Osteomyelitis is a severe infection of the bone and surrounding tissues. This infection is most often bacterial in origin but may also be fungal or viral. The pathophysiology of osteomyelitis is similar to that of infectious processes in other body tissues. Bacteria lodge in the small vessels of the bone, triggering an inflammatory response. Blockage of the vessel causes thrombosis, ischemia, and necrosis of the bone. Bone inflammation is marked by edema, increased vasculature, and leukocyte activity. A bone abscess often forms containing dead bone tissue, which is called a sequestrum. A sequestrum is a cavity that does not easily drain and therefore does not heal. While osteoblasts form new bone around the sequestrum, called the involucrum, and healing may appear to be taking place, the sequestrum remains and continues to produce abscesses and foster the growth of bacteria. Brodie’s abscesses are characteristic of chronic osteomyelitis. A Brodie’s abscess is an isolated, encapsulated pocket of microorganisms surrounded by bone matrix, most often found in long bones. These pockets of organisms are capable of reinfection at any point in time (Roberts & Lappe, 2005; Marek, 2007; Smeltzer & Bare, 2004).

3. Discuss the clinical manifestations of osteomyelitis. Osteomyelitis occurs most often in the femur, tibia, sacrum, and heels. Infection in the long bones is marked by tenderness and acute pain in a localized area, edema, redness, drainage, anorexia, headache, and possibly fever and malaise. In osteomyelitis the infection spreads from the bone to the soft tissues and can eventually break through the skin, becoming a draining fistula. The client often presents with a recent history of trauma to the limb or a new prosthesis. Osteomyelitis in the vertebrae is accompanied by pain and difficulty with mobility. The history of some clients includes drug use or a genitourinary infection. Vascular insufficiency often leads to osteomyelitis in the foot. As with many infections, clients, particularly older adults, may present with confusion. The client with chronic osteomyelitis often complains of recurrent pain, inflammation, swelling, and drainage from the site of infection (Roberts & Lappe, 2005; Marek, 2007; Smeltzer & Bare, 2004).

4. The health care provider suspects a recurrence of Mr. Lourde’s osteomyelitis. How will the health care provider confirm this diagnosis? In addition to clinical manifestations, tests used to confirm osteomyelitis include laboratory studies, X-rays, and bone scans. Blood tests often reveal an increased white blood cell (WBC) count, elevated erythrocyte sedimentation rate (ESR), and increased C-reactive protein (CRP) levels. Blood cultures or a culture of an aspirated sample from the site can further support the diagnosis and identify appropriate antibiotic therapy. In the early stages of osteomyelitis (within twenty-four to seventy-two hours), a bone scan can be done to detect lesions. Irregular decalcification, bone necrosis, and new bone formation on an X-ray are apparent in as little as seven to ten days, and a definitive change in the bone is evident three to four weeks after the onset of infection (Roberts & Lappe, 2005; Smeltzer & Bare, 2004).

5. Discuss the treatment options if Mr. Lourde has osteomyelitis of his left hip. Osteomyelitis is difficult to cure even with long-term antibiotic therapy. Antibiotics are more effective in conjunction with surgical debridement and drainage of the affected site. The surgical procedure often includes the elimination of any dead space in the area of the infection and coverage of the soft tissue. A closed drainage system, such as a HemoVac, is placed to remove residual debris. Some health care providers choose to use temporary antibiotic beads in the wound instead of drainage systems because of the risk of nosocomial infection. Temporary placement of polymethylmethacrylate antibiotic beads in the wound can be used to stabilize and temporarily maintain the dead space. Agents commonly used include vancomycin, tobramycin, and gentamicin. Placement of antibiotic beads offer higher drug levels at the infection site than the systemic administration of antibiotics. The wound is closed and the beads are usually removed in two to four weeks, at which time reconstruction of the site is performed (Marek, 2007).
Three to eight weeks of high-dose intravenous antibiotic therapy is usually indicated. Progress should be monitored with serial bone scans and ESR blood levels. Antibiotic therapy may be continued orally for up to three months after the infection is under control. Three to six months of antibiotic therapy may be necessary for infections related to orthopedic implants (Roberts & Lappe, 2005; Marek, 2007; Smeltzer & Bare, 2004).

Immobilization of the area to decrease discomfort and prevent injury of the weakened bone is suggested (Smeltzer & Bare, 2004).

6. Mr. Lourde will require at least three to eight weeks of high-dose intravenous antibiotic therapy. The health care provider has requested that a PICC be inserted. Explain what a PICC is and the potential complications associated with this device. A PICC is a peripherally inserted central catheter that allows for long-term (up to a year) venous access. A catheter is inserted into a peripheral vein (usually the cephalic or basilic vein) accessed through the antecubital space and advanced into a central vein. A dressing is applied and changed per agency policy, and daily flushing procedures are necessary to maintain the patency of the catheter.

Complications of a venous access device include local and systemic infection, thrombosis, occlusion, and air embolism. Local infection can occur at the exit site of the catheter or along the tunnel. Thromboses can occur around and along the catheter and prevent blood flow in the vessel around the catheter. This compromised circulation can affect the extremity, face, and neck. Thromboses may also form within the catheter, causing difficulty with infusion of fluids and withdrawal of blood through the PICC. Air should not be allowed to enter the PICC line. The clamp(s) should always be closed when the line is not in use and the line must not be left unclamped when the caps are not in place (Erickson & Field, 2007; Marek, 2007; Smeltzer & Bare, 2004).

7. What information should be included in the nurse’s documentation of the dressing change? When documenting the appearance of Mr. Lourde’s wound and the dressing change, the following data should be included:

   • Location of the wound
   • Dimensions in cm or inches (length is measured from the client’s head to feet and width from hip to hip)
   • Number of sutures and if the sutures are intact
   • Wound borders (approximated, even or jagged/irregular)
   • Type, amount, and odor of exudate (drainage)
   • Condition of surrounding tissue (macerated, blistered, denuded)
   • Signs of healing
   • Signs of infection
   • Type of drain and if intact
   • Medication given to client prior to dressing change
   • Type of dressing applied
   • Client’s response during dressing change
   • When next dressing change is due

8. Explain why the nurse does not document the stage of the left hip wound. Staging of a closed wound is not possible. The sutures at the surgical incision site are intact, which does not allow the nurse to visualize the base of the wound.

9. Write two expected outcomes for the duration of time that a HemoVac drainage reservoir system is in place. How often should the nurse empty the drain and how will the nurse ensure that the system is working correctly to drain the incision site? Expected outcomes of the use of a HemoVac drainage reservoir include:

   • The skin around the wound will be protected from wound drainage
   • The wound drainage will be contained in the drainage system
   • Odor from the wound will be controlled
   • The wound drainage system will not decrease the client’s comfort
• Wound drainage will be accurately measured and documented
• The wound drainage system will not decrease the client’s mobility
• The wound drainage system will cost less than frequent dressing changes

The HemoVac drain is emptied at least every eight hours (once per shift) and more often if the amount of drainage necessitates more frequent emptying and documentation.

To ensure that the drainage system is working properly, the nurse recompresses the HemoVac reservoir before closing the drain emptying port. Compression of the HemoVac provides suction removal of drainage from the wound (Altman, 2004).

10. Each of the medications below is prescribed for Mr. Lourde. For each, provide the therapeutic drug classification and discuss the purpose of the medication for Mr. Lourde and potential adverse effect(s) that the nurse should monitor.

1. **Linezolid**
2. **Fondaparinux**
3. **Hydrocodone bitartrate/acetaminophen**
4. **Acetaminophen**
5. **Docusate sodium**

(1) **Linezolid (Zyvox)**

Therapeutic drug classification: Linezolid is an anti-infective.

Purpose: Linezolid is used for the treatment of infections caused by vancomycin-resistant organisms such as *Enterococcus faecalis*. As well, vancomycin would be contraindicated for Mr. Lourde due to his allergy.

Adverse effects of concern: Linezolid should be used cautiously in clients taking antiplatelet agents. Platelet counts should be monitored more frequently in Mr. Lourde’s case since he is taking fondaparinux. A potential life-threatening adverse effect of antibiotic therapy is pseudomembranous colitis. Pseudomembranous colitis is severe inflammation of the large intestine. Symptoms include watery diarrhea, urgency to defecate, abdominal cramps, a low-grade fever, and bloody stools. The nurse should assess Mr. Lourde’s temperature and bowel sounds and note the frequency, consistency, and presence of blood in his stool throughout the course of therapy. Docusate sodium is prescribed for Mr. Lourde which may also contribute to abdominal cramps and possibly (though not likely) urgency to defecate (Deglin & Vallerand, 2005).

(2) **Fondaparinux (Arixtra)**

Therapeutic drug classification: Fondaparinux, a low molecular-weight heparin, is an anticoagulant.

Purpose: An anticoagulant is used prophylactically in clients undergoing hip surgery for up to sixty days to decrease the risk of thrombus formation that could lead to the development of a deep vein thrombosis (DVT) or pulmonary embolism (PE). Following hip surgery, “the most common and most serious complication is venous thromboembolism, which can occur in as many as 57% of patients if anticoagulant therapy is not administered” (Roberts & Lappe, 2005, p. 586). Fondaparinux is indicated for Mr. Lourde since he is at increased risk for thrombus development due to recent hip surgery, prolonged bed rest, and immobility.

Adverse effects of concern: The potential for postoperative hemorrhage is of concern for Mr. Lourde. Currently, there is minimal drainage at the incision site. However, the nurse will continue to assess the site for any indication of increased bleeding (Spratto & Woods, 2005).

(3) **Hydrocodone bitartrate/acetaminophen (Vicodin)**

Therapeutic drug classification: Hydrocodone bitartrate/acetaminophen is a narcotic (opioid) analgesic.

Purpose: A narcotic analgesic is used to relieve moderate to moderately severe pain. Pain management is indicated for Mr. Lourde following surgery and as a premedication prior to dressing changes.
Adverse effects of concern: Sedation, respiratory depression, constipation, and urinary retention are of concern and require frequent assessment by the nurse while Mr. Lourde is taking hydrocodone bitartrate/acetaminophen.

(4) Acetaminophen (Tylenol)

Therapeutic drug classification: Acetaminophen is an antipyretic and a nonnarcotic (nonopioid) analgesic.

Purpose: A nonnarcotic analgesic is used to relieve pain due to a headache or musculoskeletal pain and to reduce fever caused by infection. Acetaminophen is indicated for Mr. Lourde following surgery for the management of mild pain and for administration as needed for fever.

Adverse effects of concern: Adverse effects are often minimal and unlikely. However, hemolytic anemia is the most life-threatening adverse effect and therefore the nurse should assess for pallor of the skin, weakness, and an irregular heart rhythm. As well, hepatotoxicity is of concern because Mr. Lourde is also taking hydrocodone bitartrate/acetaminophen, which contains acetaminophen. An overdose of acetaminophen can lead to hepatotoxicity. Hepatic function should be monitored periodically during the combined use of acetaminophen and hydrocodone bitartrate/acetaminophen.

(5) Docusate sodium (Colace)

Therapeutic drug classification: Docusate sodium is a laxative.

Purpose: This laxative helps to prevent constipation and straining during bowel movements by softening the stool and promoting the passage of stool. Docusate sodium is indicated for Mr. Lourde following surgery since postoperative clients are at risk for constipation because of the effects of anesthesia and decreased gastric motility. As well, immobility is a risk factor for constipation and Mr. Lourde is on prescribed bed rest. Finally, Mr. Lourde is taking hydrocodone bitartrate/acetaminophen, a common adverse effect of which is constipation.

Adverse effects of concern: Adverse effects are minimal. Mild abdominal cramps may occur. The nurse should monitor the consistency and frequency of stools to prevent diarrhea and electrolyte imbalance. The nurse should be mindful as well that a potential life-threatening adverse effect of another medication prescribed for Mr. Lourde might cause changes in his bowel pattern. An adverse effect of linezolid antibiotic therapy is pseudomembranous colitis. Pseudomembranous colitis is severe inflammation of the large intestine. Symptoms include watery diarrhea, urgency to defecate, abdominal cramps, a low-grade fever, and bloody stools.

(Deglin & Vallerand, 2005; Spratto & Woods, 2005)

11. Help the nurse generate three appropriate nursing diagnoses for Mr. Lourde. Appropriate nursing diagnoses for Mr. Lourde include:

- Activity intolerance related to (r/t) pain, change in health status, surgical procedure, hospitalization
- Acute pain r/t inflammation in affected extremity (left hip), surgical incision
- Anxiety r/t threat to or change in health status
- Deficient diversional activity r/t prolonged immobilization, hospitalization
- Fear r/t concern that infection is chronic
- Hyperthermia r/t infectious process
- Impaired physical mobility r/t imposed immobility (bed rest) secondary to infected area
- Ineffective health maintenance r/t continued antibiotic therapy at home
- Powerlessness r/t medically imposed immobility (bed rest), chronic illness
- Risk for compromised family coping r/t shift in health status of a family member, situational crisis
- Risk for constipation r/t anesthesia, immobility, and pain medication
- Risk for deficient fluid volume r/t hypermetabolic state, presence of indwelling tubes (drain)
- Risk for disuse syndrome r/t immobilization
• Risk for impaired skin integrity (pressure sore) r/t pressure on bony prominences, shearing forces when move
• Risk for ineffective therapeutic regimen management r/t following prescribed medication therapy in the home following discharge
• Risk for self-care deficit: activities of daily living r/t restricted movement, pain

(Ackley & Ladwig, 2006)

References

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