

Student Name: Meredith Binion

Medical Diagnosis/Disease: Urinary Tract Infection

### NCLEX IV (8): Physiological Integrity/Physiological Adaptation

#### Anatomy and Physiology Normal Structures

Blood enters kidneys, kidneys filter blood waste through glomeruli, from there the waste funnels into the major calyx and minor calyx before being dispensed into the ureter to collect in the bladder. Bladder holds waste until elastic trigger is alerted to release waste through urethra to the outside of the body via the external meatus

#### Pathophysiology of Disease

UTI are caused by bacteria in the Urinary Tract system. They are separated into two different types: upper and lower. Most UTI are caused by E. coli from the GI tract entering the external meatus that attaches to the urethra. Other UTI may be caused by infections along the urinary tract such as pyelonephritis or cystitis which may result from something like a kidney stone or blockage in the pathway from the bladder to the outside of the body or the kidneys to the bladder.

### NCLEX IV (7): Reduction of Risk

#### Anticipated Diagnostics

Labs  
BUN, Creatinine, GFR,  
WBC  
Leukocyte esterase  
nitrites

#### Additional Diagnostics

Cystoscopy  
UA, CT, MRI

### NCLEX II (3): Health Promotion and Maintenance

#### Contributing Risk Factors

Sex: higher risk in females  
Sexually Active  
Birth controls  
Menopause  
Kidney Stones  
Immunosuppressed  
Catheters  
Urinary Surgery/exam  
Enlarged Prostate

#### Signs and Symptoms

Change in LOC, fever,  
chills, foul-smelling urine,  
pain, cloudy urine,  
increased urge to urinate, burning when voiding, cramping, decreased urine output  
N/V,

### NCLEX IV (7): Reduction of Risk

#### Possible Therapeutic Procedures

Non-surgical  
Fluid Therapy  
Medication

Surgical  
Stent placement

#### Prevention of Complications

(What are some potential complications associated with this disease process)

Kidney Damage  
Repeat infection  
Urethra narrowing  
Sepsis  
Shock

### NCLEX IV (6): Pharmacological and Parenteral Therapies

#### Anticipated Medication Management

Antibiotics: Fluoroquinolones  
Analgesics  
Penicillin based drugs

### NCLEX IV (5): Basic Care and Comfort

#### Non-Pharmacologic Care Measures

Warm compress, distraction  
techniques, fluid intake: water or  
cranberry juice,

### NCLEX III (4): Psychosocial/Holistic Care Needs

#### What stressors might a patient with this diagnosis be experiencing?

Pain, fear of unknown, fear of surgery, insurance coverage

### Client/Family Education

#### List 3 potential teaching topics/areas

- Educate on Front to back wiping after a BM to prevent increased risk of getting a UTI
- Educate on the importance of Urination after sex to decrease risk of bacteria entering urinary tract
- Avoid genital irritating products such as genital deodorants, douches, and powder products

### NCLEX I (1): Safe and Effective Care Environment

#### Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

Urologist, Pharmacy, Nurse, PICC team, Nephrologist,  
infectious disease,

## **Potential Patient Problems (Nursing Diagnoses)**

List two potential patient problems you will be addressing along with clinical reasoning, goals/expected outcomes, assessments, and priority nursing interventions. The patient problems must be in priority order.

Problem # 1: Acute Pain: Urethra/Bladder/Kidney

Clinical Reasoning: UTI

Goal/EO: Client will have decreased pain from 5/10 to 3/10 on a 0/10 numerical pain score after the administration of prescribed analgesics.

Ongoing Assessments: Monitor pain characteristics q4hr

Assess PQRST of pain q4hr

Assess LOC q4hr

Monitor response to pain med 30min. after administration

Monitor HR, RR, and BP q4hr

NI: 1. Administer prescribed pain medication as ordered

2. Encourage preferred distraction techniques such as reading a book q2hr

3. Maintain IVF as ordered

4. Apply warm compress 30 minutes on and 30 minutes off site of pain PRN

5. Encourage movement with energy as tolerated

6. Provide rest periods with movement to facilitate comfort, sleep, and relaxation during my time of care

---

Problem # 2 Impaired Urinary Elimination

Clinical Reasoning: UTI

Goal/EO: Client will void 300ml q4hr during my time of care

Ongoing Assessments: Monitor I&O q4hr

Assess pain, frequency, urge, and burning feeling PRN

Assess patterns of urination q4hr

Assess urine characteristics PRN

Monitor for incontinent changes PRN

NI: 1. Encourage 1000ml of water intake shift

2. Educate on proper bathroom hygiene techniques qshift

3. Educated on catheter care to prevent bacteria spread and recurring UTI qshift

4. Administer prescribed antibiotics as ordered

5. Maintain IVF as ordered

6. Administer diuretics as ordered

### ATI Virtual Clinical Questions and Reflection:

- 1) Identify two members of the healthcare team collaborating in the care of this patient:
  - a. **RN Craig**
  - b. **Martha Pharmacy**
- 2) What were some steps the nursing team demonstrated that promoted patient safety?
  - a. **Verifying Name and date of birth**
  - b. **Raising the HOB and checking O2 levels/ Administering O2 when noticing difficulty breathing\_\_**
  - c. **Reconsolidating medications with pharmacy to prevent double dosing or counteracting medications with one another**
- 3) Do you feel the nurse and medical team utilized therapeutic communication techniques when interacting with individuals, families, and health team members of all cultural backgrounds?
  - a. If **yes**, describe: I believe the care team utilized therapeutic techniques with the client when expressing concern for the situation. They created a good leaning environment by lowering the television volume. They collaborated care well between other nurses, the provider, and the pharmacy. Proper medication procedures over the phone were utilized by “write down and read back” safety guidelines for receiving spoken provider orders. They were quick to calmly ask for assistance from other staff without causing panic to the client.

### Reflection

- 1) Go back to your Preconference Template:
  - a. Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this patient.
- 2) Review your Nursing Process Form: Did you select a correct priority nursing problem?
  - a. If **no**, write what you now understand the priority nursing problem to be: **\_\_\_Decreased Cardiac Output\_\_\_\_\_**
- 3) Review your Patient Problem Form: Did you see many of your anticipated nursing assessments and interventions used?
  - a. Were there interventions you included that *were not* used in the scenario that could help this patient?
    - i. If **yes**, describe: The client could have benefitted from the encouragement of fluid intake, especially since they were originally only KVO for IV fluids. The interventions on education could have also been beneficial since very little education was offered by the care team. Educating the client on the medications they had been taking, on proper catheter care, or bathroom hygiene to prevent furthering the UTI may have also proved beneficial.
- 4) After completing the scenario, what is your patient at risk for developing?
  - a. **\_\_\_Distributive Shock: Kidney/ Heart failure\_\_\_\_\_**

- b. Why? Since the client is not voiding, they are having a build up of fluid in the body and waste products are being backed up. The UTI means bacteria has begun to build up in the body; that correlated with the SOB and heart problems, the body is unable to pump and filter blood effectively which leads to shock, sepsis, multiple organ failure, and if left untreated, probable death.
- 5) What was your biggest “take-away” from participating in the care of this patient? How did this impact your nursing practice?

My biggest understanding from participating in the care of this client was that, while a client may be admitted for a certain reason, their most pressing concern may not be related to the admitting diagnosis at all. This simulation helped me to realize that while I may be prepared to provide all these nursing interventions to a client, my care may change throughout the client’s stay depending on how the diagnosis changes. I also learned that even the “small” diagnosis such as a UTI can have life threatening issues when paired with other factors such heart issues. One must understand the signs and symptoms of complications with the body and disease processes to best provide care.

**SOAP Note Based on Priority Problem**

**Priority Patient Problem #1:** Decreased Cardiac Output

<p><b><u>Subjective:</u></b></p> <p><i>This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</i></p>	<p><b>History Present Illness (HPI): Urosepsis admitted to ED</b></p> <p><b>PMH: DM, Congestive Heart Failure</b></p> <p><b>Allergies: NKA</b></p> <p><b>Current Medications: Digoxin (Lanoxin) 0.25mg PO Albuterol (Proventil): 0.5% solution in 3ml/ 0.9% Sodium chloride via nebulizer every 6hr</b></p>
<p><b><u>Objective:</u></b></p> <p><i>This section is your clinical observations. Include pertinent vital signs, pertinent labs and diagnostics related to the priority problem.</i></p>	<p><b>Vital Signs: Pulse: 98, RR: 24, BP: 128/82, o2: 85% 4L NC</b></p> <p><b>Labs: Hgb: 11.3 g/dL Hct: 33% both are low due to hypoxia caused by decreased cardiac functioning</b></p> <p><b>Diagnostics: Chest X-ray: no evidence of focal area consolidations. Faint rounded density at base of lower left hemithorax. Pulmonary vasculature dilated consistent with long-standing COPD, heart enlarged, hypertrophy of left ventricle, costophrenic angles clear</b></p>
<p><b><u>Assessment:</u></b></p> <p><i>Focused assessments on your priority problem.</i></p>	<p><b>Monitoring O2 saturation q2hr, Assess I&amp;O q2hr, Assess HR, BP, and RR q4hr</b></p>

**Plan**

**\*Based on priority problem only**

*Include what your plan is for the client. What treatments or medications are needed? You can include procedures, consults, labs/diagnostics, etc. What nursing interventions are being performed?*

**Plan:**

1. O2 per NC; titrate to keep O2 saturation greater than 90%
2. Maintain and educate on Digoxin 0.25mg PO for Congestive heart failure
3. VS q4hr
4. Routine I&O

**Teaching & Resources: Take prescribed medication as ordered, Do not add doses or stop taking medications; Use O2 as prescribed  
Home health, Provider, pharmacy,**