Assessment and Health Promotion of the Renal/Urinary System

Napa Valley College
ADN Program
Nurs 141

Anatomy Review
- Kidney
- Adrenal Glands
- Ureters
- Bladder
- Urethra

Terminology
In order to obtain accurate data, common terms should be understood
- Micturition
- Incontinence
- Retention
- Dysuria
- Nocturia
- Nephritis
- Anuria
- Hematuria
- Oliguria
- Proteinuria
- Pyuria
- Uremia
Objective 1
Differentiate between findings that are within the normal limits and those that represent alterations in the renal/urinary system.

History and Interview
Questions to ask
a) Normal voiding patterns:
   - stream
   - frequency
   - amount
   - appearance
b) Pain, burning, back
c) Urethral discharge
d) History of STD's

Assessment of Urine
- Normal-clear yellow (straw colored)
- Black: indicates melanuria, carbonic acid in urine, malignant pigmented tumor
- Bile color: seen in jaundice
- Lime green: presence of methylene blue dye
- Milky: caused by pus in urine
- Orange-red: presence of pyridium dyes
- Redrose: blood in urine
- Aromatic: normal odor of urine
- Fecal: may due to fistula
- Fishy: indicates cystitis
- New-mown hay: indicaes diabetes
Physical Exam

General, VS, Inspection, Percussion, Palpation

Objective 2
Factors that influence urinary elimination

Growth & Development
Psychosocial
Diet
Fluid intake
Medications

Illness or injury
Body position
Gender
Catheters

Objective 3
Describe some common behaviors that suggest an alteration

- Hematuria
- Cloudy urine
- Incontinence
  - stress
  - overflow
  - urge
  - neurogenic
  - functional
- Frequency
- Hesitancy
- Urgency
- Nocturia
- Retention
Objective 4 & 5
Nursing interventions required before, during and after diagnostic tests. Identify normal values or findings.
- Urinalysis with C&S
- Blood urea nitrogen (BUN)
- Creatinine
- Ultrasound
- Intravenous pyelogram (IVP)
- 24 hour urine

Objective 6
Sample Nursing diagnoses
- Body image disturbance
- Incontinence, stress
- Incontinence, urge
- Pain
- Self-care deficit, toileting
- Skin integrity, impaired
- Urinary elimination, altered

Objective 7
Sample Nursing Care Plan
Goal: Decrease episodes of incontinence
Nursing Dx: Stress incontinence r/t decreased pelvic muscle tone or urethral sphincter trauma.
Expected Outcome: Client will achieve urinary continence by (date).
Objective 7
Sample Nursing Care Plan

Interventions:
• Have client tighten urinary sphincter during urination to feel the sensations associated with urinary sphincter contraction.
• Teach client progressive use of pelvic floor exercises (Kegel)
• Teach use of a voiding record
• Establish a toileting schedule
• Monitor urine output with each voiding
• Reduce or eliminate intake of carbonated fluids, tea, coffee, alcohol.

Evaluation: Ask client to tell you of the degree of satisfaction r/t control achieved in urinary elimination.
Reports absence or decrease of incontinent episodes

Objective 8
Actions, use and nursing implications for drug classification: diuretics, antibiotics, cholinergics

<table>
<thead>
<tr>
<th>Classification</th>
<th>Action/Use</th>
<th>Nursing Implication</th>
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<tbody>
<tr>
<td>Diuretic</td>
<td>Overall effects of diuretics is a loss of water and electrolytes from the body. Uses: to decrease edema associated with CHF &amp; HTN</td>
<td>Measure I&amp;O, Monitor electrolytes, weigh daily, monitor edema</td>
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<td>Antibiotics</td>
<td>Act to inhibit the growth and replication of susceptible bacterial organisms</td>
<td>Check for allergies, evaluate therapeutic response, absence of fever, drug may be given after culture is taken. Check for sensitivity results on C&amp;S</td>
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- *Macrobid*
- *Macrobidin*
- *Pyridium*
### Objective 8
Actions, use and nursing implications for drug classification: diuretics, antibiotics, cholinergics

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<td>Cholinergics</td>
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<td>• Urecholine</td>
<td>Facilitates transmission of impulses across the myoneural junction. Used in postop nonobstructive bladder distension and urinary distension.</td>
<td>Asses VS, I&amp;O, check for urinary retention, Bradycardia, hypotension. Give on empty stomach for better absorption.</td>
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<tr>
<td>AntiCholinergics</td>
<td></td>
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<tr>
<td>• Ditropan</td>
<td>Reduces urinary incontinence, urgency, and frequency by reducing overactive bladder contractions.</td>
<td>Asses VS, I&amp;O, check for urinary retention, palpitations, confusion, constipation. Should be swallowed whole.</td>
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<tr>
<td>• Detrol</td>
<td></td>
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<tr>
<td>• Vescicare</td>
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### Client Teaching
Prevention of UTI
- Good perineal hygiene includes cleansing the urethral meatus after each voiding or bowel movement. Wipe from front to back.
- Daily fluid intake of 2000 to 2500
- Keep urine acid by eating foods such as meat, eggs, whole grain breads, cranberries, prunes and plus.
- Loose fitting clothes – no thongs!
- Change containment devices (pads, attend) and underwear frequently.
Client Teaching

Signs & Symptoms of an UTI

- Pain or burning during urination (dysuria) – early sign
- Fever, chills, nausea, malaise
- Sensations of frequency and urgency to void – early sign
- Blood tinged urine (hematuria)
- Flank pain, tenderness

Documentation

Accurate
Factual
Complete

Let's Practice .............