Subject: **OLIGURIA/ANURIA < 30 cc/h Serum Cr > 2.5**

Original Date: October 2003

**SUBJECTIVE**

- Chief complaint
- History of present illness
- PMH/PSH
- Medications

**OBJECTIVE**

- Vital signs: Look for orthostatic signs suggesting fluid loss.
- Skin: Inspects for signs suggesting dehydration.
- Cardiopulmonary.
- Abdomen: Look for ascites or bladder distention.
- Extremities: Assess perfusion by color and temperature
- Urinalysis
- Serum electrolytes
- Spot or random urine electrolytes and creatinine
- Drug levels: Evaluate for any nephrotoxic drugs.
- Consult MD for further tests: KUB, IVP, U/S, Renal scan, Renal Biopsy.

Diagnostic Data: refer to EGS acute renal failure protocol for additional diagnostic data

<table>
<thead>
<tr>
<th>Test</th>
<th>Prerenal</th>
<th>Renal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bun:Cr</td>
<td>&gt; 20:1</td>
<td>&lt; 10:1</td>
</tr>
<tr>
<td>U/P creatinine</td>
<td>&gt; 40</td>
<td>&lt; 20</td>
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<tr>
<td>U osmo</td>
<td>&gt; 500</td>
<td>&lt; 350</td>
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<tr>
<td>U/P osmolality</td>
<td>&gt; 1.5</td>
<td>&lt; 1.1</td>
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<tr>
<td>Urine sp gr</td>
<td>&gt; 1.020</td>
<td>&gt; 1.010</td>
</tr>
<tr>
<td>U na</td>
<td>&lt; 10</td>
<td>&gt; 20</td>
</tr>
<tr>
<td>FE na</td>
<td>&lt; 1%</td>
<td>&gt; 2%</td>
</tr>
<tr>
<td>Una/Ucr/Pcr</td>
<td>&lt; 1</td>
<td>&gt; 1</td>
</tr>
</tbody>
</table>

**ASSESSMENT**

- Prerenal (renal Hypoperfusion)
  1. Shock/hypovolemia
     a. Hemorrhage
     b. Inadequate fluid resuscitation
     c. Postop Sepsis
2. Apparent intravascular hypovolemia
3. Vascular

- Renal
  1. Acute tubular necrosis
  2. Acute interstitial nephritis
  3. Acute glomerular disease

- Postrenal
  1. Urethral obstruction (Foley)
  2. Bilateral ureteral obstruction

**PLAN**

- Assess patient
- Monitor vital signs and I/O
- Flush Foley catheter
- Ensure that Foley is within the bladder and is patent.
- Refer to EGS acute renal failure protocol

**Prerenal**

a. Volume boluses: 500 ml NS and increase the baseline IV.
b. Monitor volume replacement.
c. Follow hourly urine output. Nurse to call if urine output lower than 25ml/h.

**Renal**

a. Monitor volume status with central line.
b. Check CPK for rhabdomyolysis
c. Remove potassium from IV solutions unless it is documented to be low.
d. Attempt to increase urine output with diuretic once volume status
   Initial dose Lasix 100mg IV, 2nd dose 200 mg IV if no response; if no response no need for further diuresis
e. Consult MD for Lasix/Diuril drip if UOP responds
f. Consider Zaroxyln 5-10 mg po 30 min prior to Lasix.

If above fails:
1. Consult MD for possible renal consult.
2. Readjust medication dose for renal impairment
3. Avoid scheduled potassium replacement. Treat based on lab.

**Indications for renal consult and hemodialysis**

1. Frank Oliguria/Anuria
2. Cr. Clearance of < 30 mg/dl
3. Urgent Indications-Volume overload, High K, acidosis, drug overdose, Uremia

- **Postrenal**
  a. Consult MD for possible urology consult.

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Date: _____________________