Body Fluid Job Aid for Order Entering Laboratory Testing for Nursing Units

Applicability
- Medicine Hat Nursing and Unit Clerk Staff

Purpose
- To outline for all types of fluids that can be collected and sent to the laboratory for testing, the ordering test code(s), the testing performed and clinical information of the fluid type.
<table>
<thead>
<tr>
<th>Fluid Type</th>
<th>Test Code(s) to Order in Meditech</th>
<th>Testing Performed</th>
<th>Clinical Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleural includes: Thoracentesis</td>
<td>FLU (this will order the fluid protocol) Other tests that can be ordered in addition to the protocol: Albumin ALBFLU</td>
<td>Fluid Protocol will be performed which includes a fluid total protein and fluid Lactate Dehydrogenase (LD).</td>
<td>Effusions of pericardial and pleural cavities are usually divided into transudates and exudates. Generally, transudates indicate fluid that has accumulated because of systemic disease (ex. congestive heart failure, liver cirrhosis). Exudates are usually associated with localized disorders (ex. inflammation, malignancy, infection).</td>
</tr>
<tr>
<td>Pleural Effusion</td>
<td></td>
<td>Testing also requires a serum total protein and LD to be performed on a blood sample within 24 hours of the fluid being collected. Lab will look for this upon receiving fluid and will order blood work to be drawn if required.</td>
<td></td>
</tr>
<tr>
<td>Pericardial includes: Pericardial Effusion</td>
<td></td>
<td>Fluid will be tested to see if it is an exudate or a transudate. If the fluid is a transudate no further testing will be completed. If fluid is an exudate, a cell count, culture and cytology will automatically be tested on the fluid.</td>
<td></td>
</tr>
<tr>
<td>Pericardiocentesis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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## Ascites

Includes:

- Paracentesis fluid
- Peritoneocentesis
- Peritoneal Fluid (not to be confused with Peritoneal Dialysate fluid - see below)

### Other tests that can be ordered in addition to the protocol:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>LDFLU</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>CHOLFLU</td>
</tr>
<tr>
<td>Chloride</td>
<td>CLFLU</td>
</tr>
<tr>
<td>Creatinine</td>
<td>CREAFLU</td>
</tr>
<tr>
<td>Glucose</td>
<td>GLUFLU</td>
</tr>
<tr>
<td>Potassium</td>
<td>KFLU</td>
</tr>
<tr>
<td>Lipase</td>
<td>LIPFLU</td>
</tr>
<tr>
<td>Sodium</td>
<td>NAFLU</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>TRIGFLU</td>
</tr>
<tr>
<td>Uric Acid</td>
<td>UREAFLU</td>
</tr>
<tr>
<td>Urea</td>
<td>UREFLU</td>
</tr>
<tr>
<td>pH</td>
<td>PHFLU</td>
</tr>
</tbody>
</table>

- Ascites Fluid Protocol will be performed which includes a cell count, fluid total protein and fluid Albumin.
- The Serum Ascites Albumin Gradient will be calculated.
- Testing also requires a serum albumin to be performed on a blood sample within 24 hours of the fluid being collected. Lab will look for this upon receiving fluid and will order blood work to be drawn if required.
- If a differential is performed on the cell count and the absolute neutrophil count is > 249 x 10⁶/L then a culture will automatically be tested on the fluid.
- The serum ascites albumin gradient or gap (SAAG) is a calculation used in medicine to help determine the cause of ascites.
- "High albumin gradient (SAAG/>=11g/L) is associated with the following conditions: Cirrhosis, Alcoholic hepatitis, Heart failure, Massive hepatic metastases, Heart failure/constrictive pericarditis, Budd-Chiari syndrome, Portal vein thrombosis and Idiopathic portal fibrosis."
- "Low albumin gradient (SAAG < 11 g/L) is associated with the following conditions: Peritoneal carcinomatosis, Peritoneal tuberculosis, Pancreatitis, Serositis and Nephrotic syndrome."

## Peritoneal Dialysate

### Random Sample

- Send to laboratory - Lab will enter into Meditech
- Order CCFLU and CUBF

- Cell Count, Culture and gram stain

### Fasting Sample

- Send to laboratory - Lab will enter into Meditech

- Creatinine, Urea, Glucose, Cell Count (if culture ordered)

### Overnight Sample

- Send to laboratory - Lab will enter into Meditech

- Creatinine, Urea, Cell Count (cell count only if culture ordered)

### 24 Hour Sample

- Send to laboratory - Lab will enter into Meditech

- Creatinine, Urea, Cell Count (cell count only if culture ordered)

- Routinely an aliquot of the 24 hour dialysate fluid will be sent to the lab for assessment of the adequacy of the dialysis.
- From the used solution, urine, and blood measurements, the care team can compute a urea clearance, called Kt/V, and a creatinine clearance rate (adjusted to body surface area). The residual clearance of the kidneys is also considered. These measurements will show whether the PD prescription is adequate.
| Synovial / Bursa | CCSNV - If cell count ordered  
CRYSNV - if crystals ordered  
CUBF - if culture ordered | Testing performed as ordered by Physician |  
- The leukocyte count is an important test for classification of an effusion as septic, inflammatory, or non-inflammatory.  
- The leukocyte count may be used as a rough measure of the intensity of inflammation in sequential samples. |
| CSF | CSF and CUCSF  
CSF code includes:  
CCCSF  
PROTCSF  
GLUCSF | Testing includes Total Protein, Glucose, Cell Count, and Culture  
CSF tubes should be labelled as follows unless specifically indicated differently by Physician:  
- Tube #1 Chemistry- PROTCSF (protein) and GLUCSF (glucose)  
- Tube #2 Microbiology- CUCSF (culture)  
- Tube #3 Hematology- CCCSF (cell count)  
- Tube #4 Virology/Other |  
- The most important disease to diagnose is bacterial infection of the meninges  
- White cell counts are increased  
- Bacterial infections are usually associated with increased neutrophils.  
- Viral meningitis may be associated with mild to severe leukocytosis with predominant lymphocytosis. |
| Cyst | CCFLU - if cell count ordered  
CCWD - if Culture ordered | Testing performed as ordered by Physician |  
- From Bile Duct |
| Jackson Pratt Drain (JP Drain) | CCFLU - if cell count ordered  
CUWD - source- drainage- if culture ordered | Testing performed as ordered by Physician |  
- From Bile Duct |