TOTAL

FAITAL RENAL FUNCTION TESTS

These are always to be done with an inlying catheter in place. The latter must be tied in place securely, but comfortably. The eye of the catheter should be 1/2" above the level of the internal urethral orifice. The catheter should be tested carefully to be sure that it drains freely and completely empties the bladder.

Important: If the catheter does not drain properly the test will be inaccurate and its results misleading.

The catheter should be provided with a cork.

A Concentration-dilution test -

This is one of the most valuable of the renal function tests.

Technique -

1. Nothing by mouth after 6 P.M. the evening before the test and until the test is completed.

2. At 7 A.M. insert catheter, drain bladder, discard urine specimen, fix catheter in place, cork catheter.

3. At 8 A.M. patient receives 1000 cc. of water to drink. Attendant should stay with him until he consumes water and should see to it that he does so. Water should be consumed within 1/2 hour. Preferably sooner.

4. Urine specimens are taken, every 1/2 hour, starting at 8 A.M. and the last at 12 noon. The cork is removed and the bladder is emptied into a bottle. The cork is then replaced until the next specimen is taken. Each specimen is collected in a separate clean (not necessarily sterile) bottle. Each bottle is labeled with the time at which the specimen is taken. This should be done as soon as the specimen is collected.
A. Each specimen is examined for
1. Quantity in cc.
2. Specific gravity

B. The results are recorded on the chart as follows:

Nothing by mouth after 6 P.M. 6/5/42
1000 cc water by mouth at 8 A.M. 6/6/42

<table>
<thead>
<tr>
<th>TIME</th>
<th>QUANTITY</th>
<th>SPECIFIC GRAVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>50 cc</td>
<td>1024</td>
</tr>
<tr>
<td>8:30</td>
<td>80 cc</td>
<td>1022</td>
</tr>
<tr>
<td>9:00</td>
<td>80 cc</td>
<td>1018</td>
</tr>
<tr>
<td>9:30</td>
<td>120 cc</td>
<td>1012</td>
</tr>
<tr>
<td>10:00</td>
<td>250 cc</td>
<td>1002</td>
</tr>
<tr>
<td>10:30</td>
<td>200 cc</td>
<td>1002</td>
</tr>
<tr>
<td>11:00</td>
<td>150 cc</td>
<td>1003</td>
</tr>
<tr>
<td>11:30</td>
<td>100 cc</td>
<td>1010</td>
</tr>
<tr>
<td>12:00</td>
<td>80 cc</td>
<td>1020</td>
</tr>
</tbody>
</table>

While the test is being carried on nothing is given by mouth except the 1000 cc. of water at 8 A.M. The patient is not allowed to eat or drink anything until 12 noon. Even chewing gum is forbidden. He must not smoke. The specific gravity and quantity determinations of the separate specimens are carried out in the ward by the medical officer.

They are not to be sent to the laboratory.

Indigo Carmin Test -

6 cc of indigo carmin is injected intra-muscularly. Specimens are collected in separate test tubes every 5 minutes for 30 minutes. The blueness of the urine is indicated as:

- Intensive blue
- Dark "
- Moderate "
- Light "
- Pale "
- Green
- Faint trace of color