PROSTASCINT SCANNING

Radiology Associates of Clearwater

INDICATIONS:

Initial staging of prostate ca prior to surgery in high risk patients (usually PSA >20).
Detection of prostate cancer recurrence with rising PSA.

SCHEDULING:

1. Determine patient’s diagnosis and other vital information.

2. Determine referring physician’s reason for requesting evaluation (i.e., preop staging for initial diagnosis, evaluation for recurrence in setting of a rising PSA).

3. Ask patient if he has had prior imaging study with Prostascint or other monoclonal antibodies, such as Oncoscint, CEA (scan), and Octreoscan. Contact Nuclear Medicine physician if so. Do not reconstitute vial until this question has been answered. A HAMA blood test may have to be drawn.

4. This test should be scheduled as an elective outpatient procedure. Do not schedule for inpatients unless approved by Nuclear Medicine physician.

5. Schedule as follows:

<table>
<thead>
<tr>
<th>Injection (1hr)</th>
<th>Imaging #2 at 96 hrs (3-4 hrs)</th>
<th>Imaging #3 at 120 hrs (2-2½ hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Friday</td>
<td>Saturday</td>
</tr>
<tr>
<td>Thursday</td>
<td>Monday</td>
<td>Tuesday</td>
</tr>
<tr>
<td>Friday</td>
<td>Tuesday</td>
<td>Wednesday</td>
</tr>
</tbody>
</table>

6. Schedule all imaging sessions on a SPECT/CT camera.

7. Determine if recent imaging studies and pertinent reports are available (biopsy, surgery, radiation therapy, pathology, PSA,
prostatic acid phosphatase (PAP), CT or MRI abdomen/pelvis, US). Obtain copies.

INSTRUCTIONS:

1. Instructions to Patients (to be given by RN over phone prior to appointment, or technologist if RN not available):
   a. Notify/contact patient to confirm appointment time, and take patient history.
   b. No specific instructions for first day.
   c. For Day 4 or 5 imaging - use "bowel prep" (Magnesium citrate single dose the night before the exam).
      Note: Do not give if in renal failure.
   d. Day 4 imaging can take 2 hours.
   e. Day 5 imaging can take 2 hours (Foley catheter may be inserted for images on Day 4, if needed).
   f. Inform patient that material will not be reconstituted until he arrives, due to the high cost of the imaging agent.

2. Lab (to be available before study is initiated):
   a. PSA original (highest), nadir (lowest) and most recent.
   b. HAMA titers if patient has had monoclonal antibodies in the past.
   c. Pathology.

3. Image Correlation (reports to be available before study is initiated):
   a. Most recent bone scan.
   b. Pelvic/abdominal CT or MRI.
   c. Get surgical and pathology reports from referring doctor or medical records, and those on any treatment the patient has received.

RADIOPHARMACEUTICAL:

5 mCi In111 Capromab pendetide IV (4-6 mCi acceptable).
PATIENT PREPARATION:

1. If prior monoclonal antibody test has been performed, it may be necessary to obtain a HAMA blood test before scheduling. Ask the Nuclear Medicine physician.

2. No special dietary changes required on day of injection, although it is suggested that patient eat light meals on Day 3 and 4.

3. Patient should be given a cathartic (Magnesium citrate, 1 dose) to take prior to the 96 hr and 120 hr imaging. Patient should be well hydrated. Drink >eight 12-oz glasses of water or juice daily on Day 1 and Day 2.
   **Note:** Do not give cathartic if in renal failure.

EQUIPMENT AND PREPARATION:

1. **Gamma Camera – Symbia SPECT/CT:**
   - Medium energy collimators (#5)

PROCEDURE:

1. Order In111 chloride dose, and be sure there are Prostascint kits available after confirmation of patient for date and time (A unit dose may be used).

2. **Do not make up** dose until patient has arrived, and be certain that there is no prior history of monoclonal antibody use, ☹ HAMA titers, or allergies.

3. Explain procedure in detail, i.e., injection, imaging, bowel prep.

4. Start IV reseal for injection.

5. Dose must be between 4-6 mCi (if <4 mCi, dose is unacceptable).

6. Patient is then injected with Prostascint, and scheduled to return at 96 hr and 120 hr.
7. At 96 hr imaging patient is told to remove pants if they interfere with the exam and given a gown.

8. Patient is positioned under the camera with medium energy collimators, and whole body planar imaging is performed from head to mid-thigh on In111 window for approximately 15-20 min.

9. SPECT/CT of the abdomen/Pelvis (Dome of liver to mid thigh) is done, 3°, 40 sec./stop, 180° rotation, 64x64. Presets are on computer.

10. Day 5 imaging – Only if requested by the Nuclear Medicine Physician.

**Bowel Prep:**

1. Magnesium citrate - Single dose to be taken the night before imaging. Give patient instructions on how to administer, and date and time to return to department for imaging.

2. Have patient hydrate well prior to and during bowel prep.

**Note:** DO NOT GIVE BOWEL PREP TO PATIENT WITH RENAL FAILURE.

**REFERENCES:**


4. Phase 3 Study of Intravenously Administered 111In-Capromab Pendetide in the Evaluation of Patients With Suspected Residual or Recurrent Prostate Cancer Following Radical Prostatectomy Who are Scheduled to Undergo Biopsy of the Prostatic Fossa. CYTOGEN Research Report RR-1168. CYTOGEN Corporation. 1994