

PARATHYROID SCAN (Dual Phase Study)

| Indications | Detection and localization of primary and secondary parathyroid cancer. Identification of single adenomas, multiple adenomas, or glandular hyperplasia in patients with newly diagnosed hypercalcemia and elevated parathyroid hormone (PTH) levels. Localization of parathyroid tissue after surgery for persistent or recurrent hyperparathyroidism. (elevated serum calcium and PTH) |
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| Conflicting Exams and Medications | Patients on Calcium medications Patients on Thyroid medications and/or received recent iodine contrast studies Patient should be off thyroid medication for 5 days, contrast studies 7-10 days Patient too agitated or prone to movement or claustrophobia |
| Exam Time | 2 hours |
| Patient Preparation | None |
| Patient Positioning | Supine |
| Radiopharmaceutical and Dose | ^{99M} Tc-sestamibi Dose Range 16-30 m Ci/injection |
| Acquisition Protocol | Collimator- Low energy, high resolution, or pinhole Counts/Time- Acquire image for 10 minutes, and if digital acquisition use a 128x128 or larger matrix, 1,000,000 or 300- 900 sec/image |
| Procedure | Routine views- Anterior images of the neck at 5 min and 120 minutes after injection. A single anterior large- FOV image should also be obtained that includes mediastinum |