



# Brain Death Study with Tc-99m DTPA (Tc-99m Pentetate)

## INDICATIONS:

- For the assessment of brain blood flow in patients suspected of brain death.

## CONTRAINDICATIONS:

- Known allergic reaction to Tc-99m DTPA.
- Adverse Reactions:
  - Pyrogenic and allergic reactions to Tc-99m Pentetate injection preparations have been reported in literature.

## SUPPLY AND STORAGE:

- Tc-99m is supplied as a single dose from radiopharmacy.
- Expires 6 hours after preparation.

## PATIENT PREPARATION:

- No special patient preparation.

## DOSE AND ADMINISTRATION:

- 70-1110 MBq (20-30 mCi) of Tc-99m.
- Important to give as a rapid bolus.
- May place tourniquet around patient's head to reduce flow to the scalp.
- Start imaging just before or immediately after bolus injection to image flow.

## IMAGING PARAMETERS:

- Uptake Time:
  - No uptake time. Start imaging directly before or after bolus injection.
- Acquisition Parameters:
  - 2 second images for 60 seconds acquired in Anterior/Posterior or Anterior/Lateral of flow and delayed statics. Make sure to include all of patient's head and neck. Camera should be very close to patient's face and head.
- Patient Positioning:
  - Supine, head stabilized.
- Display flow as cine and a multi-frame snapshot. Check with physician for preferences.

## POST EXAM PATIENT INSTRUCTIONS:

- None