

PET Protocol/FDG Brain Tumor Protocol

Patient Prep: Adult- NPO for 4 hours prior to F-18 FDG injection (water encouraged).

Infant- NPO for 2 hours prior to F-18 FDG injection (water encouraged).
I.V. or hep lock is necessary along with a possible sedation order.

Radiopharmaceutical: F-18 FDG

Dose: Determined by patient weight with minimum and maximum values.

Adult- 5 - 15 mCi
Pediatric- 0.5-10.0 mCi (0.143 mCi/kg)

Acquisition mode: 3D

Acquisition time: 6 mins

Attenuation correction: Performed using measured with 3 min transmission scan with segmentation applied.

C2. Method

- 1) Patient is interviewed for pertinent medical history and discussion of PET procedure.
- 2) Injection of F-18 FDG is made with the patient in supine position. After the injection the room lights are dimmed. The patient is instructed to stay awake but quiet. Approximately 80% of the glucose localization occurs in 20 minutes, so movement and/or sedation may proceed 20 minutes after injection.
- 3) Patient is asked to empty bladder after injection.
- 4) Imaging begins at 40-60 minutes post F-18 FDG injection.
- 5) Patient is positioned in PET head holder.
- 6) Patient is asked to empty bladder post scanning; hydration and frequent bladder emptying are encouraged.
- 7) Any variation in the above technique should be brought to the attention of the PET attending physician.
- 8) Any possibility of pregnancy and/or breastfeeding must be ruled out prior to injection/inhalation of radioactive material.