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.