

PET scan for hyperinsulinism

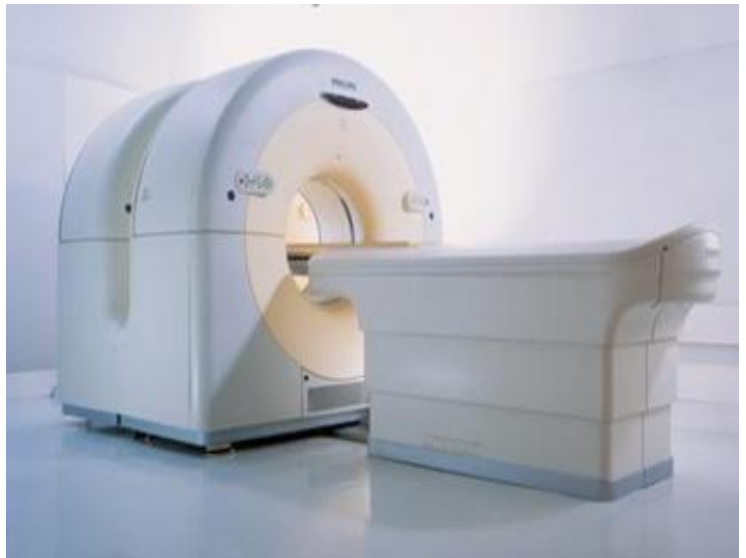
What is a PET scan for hyperinsulinism?

PET scan is an imaging test in nuclear medicine that uses a special radioactive drug (tracer) to take pictures of the pancreas. This imaging test is called **F-DOPA PET scan** as the tracer used is 18F-Fluoro-DOPA (F-DOPA).

The F-DOPA tracer is used to highlight areas of the pancreas that make too much insulin on the PET scan images. The test includes a low dose CT scan (computerized tomography) done at the same time on the same machine, to help define exactly where the highlighted area is located within the pancreas and determine the location of blood vessels and other vital structures.

What does it involve?

- Admission to PCH under the endocrine team two days prior to the scan. Drugs like diazoxide/octreotide will be ceased if deemed safe by the endocrinologist.
- Glucose levels will be closely monitored during ward stay.
- Intravenous catheter will be inserted and glucose levels will be maintained on glucose-containing fluids or glucagon infusion if unable to maintain glucose above 3mmol/l.



On the day of the PET scan.

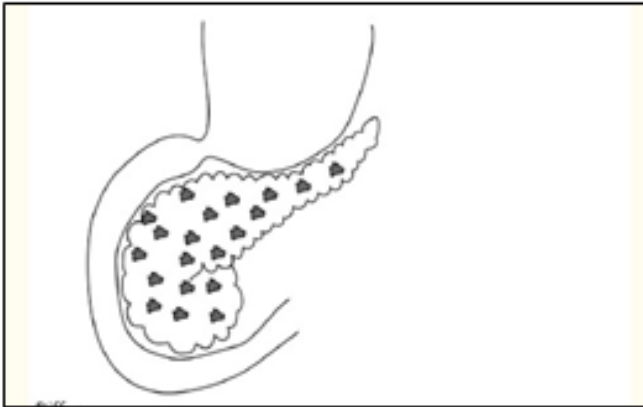
- Body copy Your child will be need to be fasted for four hours prior to the scan
- Your child will be transferred from Perth Children's Hospital (PCH) to the WA PET Service at Sir Charles Gairdner Hospital (SCGH)
- Depending on the age of your child, anaesthesia or sedation may be required for the PET/CT scan
- The F-DOPA (tracer) is administered by injection through the pre-sited intravenous catheter. Imaging begins immediately following injection and will take approximately 1 hour.



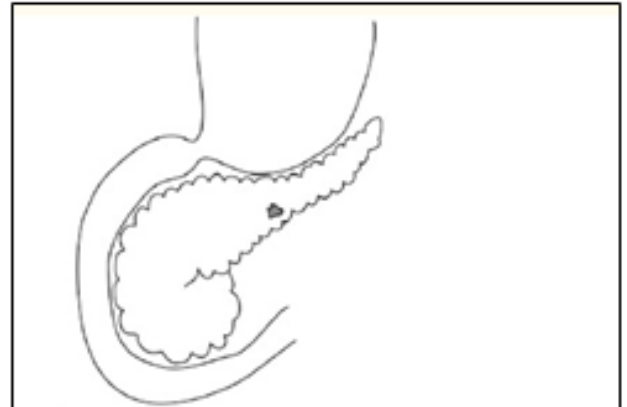
- Apart from the CT component of the study (which only takes a few minutes), you will be able to stay with your child throughout the procedure.

What are we looking for?

The images will tell us if the hyperinsulinism is diffuse (involves the entire pancreas) or is focal (involves a localised region of pancreas). If there is a focal lesion, this can be removed surgically.



Diffuse



Focal

Where does the PET scan occur?

Department of Nuclear Medicine and WA PET Service
 Level 1, G block
 Sir Charles Gairdner Hospital
 QEII Medical Centre
 Hospital Avenue, Nedlands

If you need further information,

Department of Nuclear Medicine
 Sir Charles Gairdner Hospital
 Tel: (08) 6456 2322



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 Child and Adolescent Health Service



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