Patients on Parenteral Nutrition +/- Lipid that require MRI

It is important that minimal equipment is taken into the MRI scanning room.

Parenteral Nutrition (PN) and lipids should **never** be disconnected then reconnected to a peripheral or central venous access device

(i.e. disconnected to attach the extension tubing needed for patients having an MRI scan who are receiving IV fluids/nutrition).

There may be exceptional circumstances where it is unavoidable that a patient remains on PN +/- lipid (e.g. cases of severe hyperinsulinaemia). These patients must be discussed on an individual basis by the treating team with the radiology and nutrition teams. If a decision is made to continue PN during an MRI procedure extension tubing can be found on PICU (Rosella Ward).

**When a patient on PN +/- lipid is booked for an MRI:**

1. Ensure that PN +/- lipid is ordered for the day of the MRI scan
2. Prescribe IV fluids at the same rate as the PN to be started 1 hr prior to scheduled MRI time (or just prior in an emergency)
   
   - Choice of IV fluids should be guided by the electrolyte content of the Parenteral Nutrition, please try and order standard IV fluid bags where possible i.e. 0.45%/0.9% Nacl + 5% dextrose with potassium added to match the content of the PN.
3. Monitor Blood Sugar Levels and follow hypoglycaemia guidelines if this occurs
4. Connect new supply of PN +/- lipid at the normal time (generally 1800)
5. Cease IV fluids when PN +/- lipid is reconnected

**Abbreviations**

MRI Magnetic Resonance Imaging

PN Parenteral Nutrition

IV Intravenous

**Resources**

- Clinical practice guideline parenteral nutrition RCH
- Central Venous Access Device policy
- Intravenous fluids

**Useful Links**