

## **Definition and Management of New Onset Diabetes Mellitus after Transplantation (NODAT)**

### **Diagnosis**

Monitor random blood glucose fortnightly for the 1<sup>st</sup> post transplant month & then monthly thereafter. If abnormal arrange for fasting blood glucose.

### **Diagnostic Criteria**

- Request a fasting plasma glucose
- The test should be requested via TDWEB by selecting Glucose/HbA1c option and then confirming 'fasting' and 'non-diabetes' status from the pop-up menu.
- If fasting plasma glucose is elevated, the lab will **automatically** undertake HbA1c estimation.

		HbA1c (%)	
		≥ 6.5%	< 6.5%
Fasting Blood Glucose (mmol/L)	≥ 7.0	Diabetes confirmed	Repeat FBG
	6.1-6.9	OGTT	IFG (Impaired Fasting Glucose)

Results will be reported by the lab:

- Diabetes excluded: if FBG ≤6.0 mmol/L
- Diabetes confirmed: if FBG ≥7.0 mmol/L & HbA1c ≥6.5%
- Impaired Fasting Glucose: if FBG is 6.1- 6.9 mmol/L & HbA1c < 6.5%
- OGTT is not routinely required unless HbA1c ≥ 6.5% and FBS is 6.1-6.9

## Management strategy

- Diet / Lifestyle modification / Smoking cessation
- Pharmacological intervention
- Adjustment of immunosuppression

### Therapeutic Goals

- Glycaemic control:      pre prandial      5 – 7.2mmols/l  
   post prandial      <10mmols/l  
   HbA1c              < 7%
- BP control:                      <130/80mmHg
- Lipids:                              LDL < 2.6mmols/l  
  
   LDL > 3.4mmols/l treat with statins & diet  
   LDL 2.6 to 3.4mmols/l diet & then statins

## Management

- Refer to Diabetic team @ NXH
- Refer to dietitian
- Cardiovascular risk assessment – see above re BP & lipids
- Commence short acting sulphonylurea
- Review immunosuppressive therapy – see below

## Adjustment to Immunosuppression

- Aim for maintenance prednisolone dose of 5mg daily by 6 months
- If there is no contraindication then enact the protocol for corticosteroid withdrawal @ 6 months
- If CNi is Tacrolimus then adhere to drug levels in protocol if high immunological risk kidney otherwise aim for lower target levels; 4 - 6ng/ml @ 6 – 12 months and 3- 5ng/ml for 12 months +.
- If maintained on CyA use usual targets in stated protocol