Steroid Induced Diabetes (Palliative care)

Steroid induced Diabetes mellitus

Steroids (glucorticoids) have a direct metabolic effect and cause a predictable rise in blood glucose levels, regardless of the route of administration.

The effect is dose dependent and around one in five patients on steroids can develop diabetes. Patients starting high dose steroids (Dexamethasone ≥4mg/day) and/or those with hyperglycaemic symptoms should be screened for diabetes.

Oral steroids given in the morning will tend to cause a rise in glucose in the afternoon and early evening with a fall overnight until the next day’s dose is given. The aim of treatment is to match that pattern with oral agents or insulin without risking overnight hypoglycaemia.

Before starting steroids in an individual with diabetes, plans should be in place to minimise the impact on glucose control by adjusting or adding medication as needed.

When the dose of corticosteroid is tapered, insulin or hypoglycaemic agent requirements decline in proportion and hypoglycaemic drugs may need to be stopped.
Management of Steroid induced diabetes (Palliative care)

**Screening**
Check for glycosuria 24-48 hrs after starting steroids (Dexamethasone ≥ 4 mg)
Ask for hyperglycaemic symptoms*

If either present

**Assessment**
Check blood glucose pre teatime (6 PM) and/or pre-breakfast

**Action**

- **BG <15mmol/l**
  - No need to check again unless steroid dose increased or *symptomatic

- **BG >15mmol/l**
  - (more than one occasion)
  - Step 1: Start gliclazide 80mg in the morning
  - Step 2: Increase dose up to 240 mg in the morning (if required)
  - Step 3: Stop Gliclazide & start once daily +Biphasic insulin or # Isophane insulin at breakfast. Start at 12 units and titrate up by 2 units every 3-4 days

**Monitoring**
Monitor blood sugars daily (pre-evening meal)
Aim for BG of 5-15 mmol/l
Relax testing frequency once target achieved

Diabetic medications will need to be discontinued if steroids are discontinued

Steroids given once daily in the morning may cause afternoon and early evening hyperglycaemia

* Excessive thirst, dry mouth, excessive urine (polyuria)

+Biphasic insulin: Humulin M3, Novomix 30, Humalog Mix25

# Isophane insulin: Human Insulatard, Humulin I