

Section D - Management of VRIII

1. Review at 6 hours and every 12-24 hours thereafter

- 1.1 Consider whether VRIII is still required.
 - 1.1.1 If capillary blood glucose (CBG) levels are **>12 mmol/L** and VRIII is to continue, **move to Scale 3**
 - 1.1.2 If CBG levels are **<4 mmol/L** and VRIII is to continue, **move to Scale 1**
- 1.2 Ensure a new VRIII chart is used every 24 hours

2. Stopping VRIII

- 2.1 Ensure the patient is eating and drinking reliably and CBG levels are to target at 6-12 mmol/L
- 2.2 For patients with Type 1 diabetes, ensure the patient's basal insulin has been administered prior to discontinuation of VRIII
- 2.3 At the next appropriate mealtime, restart usual insulin and diabetes medications, considering any relevant adjustments:
 - 2.3.1 If on basal bolus, give the usual dose of rapid-acting bolus insulin (NovoRapid/Humalog/Fiasp) with meal
Reduce dose by ~50% if small meal. Prescribe the long-acting insulin at the usual dose taken prior to admission
 - 2.3.2 If on twice daily mixed insulin, choose breakfast or evening meal time to give the usual dosage
Consider up-titration if HbA1c is out of target or if high insulin requirement on VRIII
Consider down-titration if HbA1c is low or if the patient is not eating and drinking normally
 - 2.3.3 If on insulin pump, discuss with the patient (and with the diabetes team if needed) regarding restarting pump
 - 2.3.4 Restart oral diabetes medications
Metformin: Maximum dose of 500 mg twice daily if eGFR 30-45 mL/min. Stop if eGFR less than 30 mL/min
Gliclazide: Reduce dose if eating less than usual
GLP-1 receptor agonists (e.g. semaglutide, liraglutide) and DPP-4 inhibitors (e.g. sitagliptin): Avoid in pancreatitis
SGLT2 inhibitors (e.g. dapagliflozin, empagliflozin): Avoid in acute kidney injury, sepsis or DKA
- 2.4 Discontinue VRIII **30 minutes after administration of rapid-acting insulin and meal**
- 2.5 Check CBG 1 hour after discontinuation, then every 4 hours for the next 24 hours
- 2.6 If the blood glucose rises, do not restart the VRIII unless the patient meets the indication. Review usual diabetes medications.
Discuss with the diabetes team if advice is needed

3. Hypoglycaemia

- 3.1 For management of hypoglycaemia (CBG less than 4 mmol/L) please follow Lothian guidance on management of hypoglycaemia
Guidance can be found on <http://www.edinburghdiabetes.com/>
- 3.2 Pause or stop VRIII, assess ABCDE and treat hypoglycaemia
- 3.3 If patient is nil by mouth or has impaired consciousness, give 100 mL of 20% dextrose or 200 mL of 10% dextrose IV over 15 minutes. If no IV access, give 1 mg glucagon IM. Check CBG after 10 minutes and repeat treatment
- 3.4 Once CBG is more than 4.0 mmol/L, restart VRIII within 20 minutes. The half-life of intravenous insulin is very short (7-8 minutes) and restarting the VRIII promptly minimises the risk of ketosis
- 3.5 Review reason for hypoglycaemia. Does the VRIII need to be stopped? Or switched to Scale 1?
Is glucose substrate fluid definitely running?

4. Hyperglycaemia and ketones monitoring

- 4.1 If not meeting glucose targets, requiring VRIII for more than 24 hours, or if HbA1c >53 mmol/mol, contact the diabetes team
- 4.2 Monitor ketones in Type 1 diabetes every 4 hours when CBG >14 mmol/L, and consider diabetes ketoacidosis if ketones >1
- 4.3 In Type 2 diabetes, ketones monitoring is unnecessary unless VRIII is being used in euglycaemic ketoacidosis

Diabetes Team Contact Details

Diabetes Registrars
On call at RIE (07870 158298), WGH (07976 977402) and SJH (via switchboard)
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Further information can be found at <http://www.edinburghdiabetes.com>