MANAGEMENT OF DIABETES DURING RAMADAN

QUICK REFERENCE GUIDE

This Quick Reference Guide provides key messages and a summary of the Practical Guide to Diabetes Management in Ramadan. Details of the evidence supporting these recommendations can be found in the Practical Guidelines, available on the following website: http://www.idf.org/news/idf-dar-diabetes-in-ramadan-guidelines

Summary: Management algorithm

Pre-Ramadan assessment (6-8 weeks before Ramadan)

Risk stratification

Very high risk group

High risk group

Moderate/Low risk group

Advise not to fast

Support patient decision if fasting

Frequency of SMBG: several times a day

Frequency of SMBG: 1–2 times a day

Structured Patient Education (Role of SMBG, When to break the fast, When to exercise, Fluids and meal planning)

All patients should break their fast if:

• Blood glucose <3.9 mmol/L
• Re-check within 1 hour if the blood glucose level is 3.9 – 5.0 mmol/L
• Blood glucose >16.7 mmol/L
• Symptoms of hypoglycaemia or acute illness occur

Post-Ramadan follow-up: Warn about risk of hyperglycemia during 3-day Eid ul Fitr festival. Discuss medication and regimen readjustments.

Endorsed by the ADS

References:

*Decision to fast based on medical opinion and ability of the individual to tolerate fast
**Consider individualisation of care
Stratification of risks associated with fasting

During Ramadan, the risk of events such as hypoglycaemia and hyperglycaemia is increased due to fasting in patients with diabetes. It is important to quantify and stratify the risk of each patient to provide best possible care.

### Medication adjustment for people with diabetes

Adjustments to the dose, timing or the type of medication are needed to minimize the risk during fasting.

#### Oral anti-diabetic drugs (OADs)

- **Metformin**
  - 1 Time daily dosing: No dose modification. To be taken at iftar (evening meal at sunset)
  - 2 Times daily dosing: No dose modification
  - 3 Times daily dosing: Afternoon dose should be combined with dose taken at iftar. Morning dose to be taken before suhoor (pre-dawn meal before fasting begins at sunrise)
  - Prolonged-release metformin: No dose modification

- **Acarbose**
  - No dose modifications required
  - To be taken at iftar

- **Thiazolidinediones (TZDs)**
  - No dose modification required
  - Doses can be taken with iftar or suhoor

#### Short-acting insulin secretagogues

- Three-meal dosing may be reduced or redistributed to two doses during Ramadan according to meal size

#### Sulphonylureas (SUs)

- 1 Time daily dosing: In patients with well-controlled BG levels, the dose may be reduced
  - 2 Times daily dosing: No dose modification. In patients with well-controlled BG levels, the suhoor dose should be reduced
  - Older drugs in the drug class: Older drugs (e.g. glibenclamide) carry a higher risk of hypoglycaemia and should be avoided.
  - Second-generation SUs (gliclazide, glimepiride) should be used in preference

#### Sodium-glucose co-transporter-2 (SGLT2) inhibitor

- To be used with caution in some patients
  - During Ramadan no dose adjustment is required and it is advised that the dose be taken with iftar

#### Incretin-based therapies

- Incretin-based therapies are associated with a lower risk of hypoglycaemia and may be preferable for use during Ramadan.

#### Dipeptidyl peptidase-4 (DPP-4) inhibitors

- No dose modification

#### Insulin

- **Long/intermediate-acting (basal) insulin**
  - Reduce dose by 15–30%.
  - To be taken at iftar

- **Short-acting insulin**
  - 1 Time daily: Normal dose to be taken at iftar
  - 2 Times daily: Normal dose to be taken at iftar, Suhoor dose to be reduced by 25–50%
  - 3 Times daily: Afternoon dose to be omitted. Iftar & suhoor doses should be adjusted. Dose titration to be carried out every 3 days

- **Insulin pump**
  - Basal rate: Dose to be reduced by 20–40% in the last 3–4 hours of fasting.
  - Dose to be increased by 0–30% early after iftar
  - Bolus rate: Normal carbohydrate counting and insulin sensitivity principles apply