



## Diabetes Palliative Care Guidelines

### Objective:

The aim of this document is to provide a practical guide to the management of diabetes in terminally ill patients receiving palliative care in the community, hospice and hospital settings.

### Guideline development:

The Diabetes Specialist team in partnership with the Palliative Care team, community team and primary care has developed this local guidance. It is envisaged that the guidelines will help to improve the quality and access to care for patients with diabetes and their carers during the end of life.

The recommendations should be considered as guidance only. Any judgment relating to a clinical intervention should be made in the context of the clinical presentation, the wishes and expectations of the patient and the available treatment options.

### General principles:

- Avoiding hypoglycaemia and symptomatic hyperglycaemia (thirst, dehydration, confusion)
- Avoid unnecessarily monitoring of blood glucose if at all possible
- Simplify hypoglycaemia treatment and insulin regimes
- Relax blood glucose targets (5-15 mmol/L)
- Always consider benefit versus burden of steroid use in patients with diabetes as they may worsen blood glucose control.

### Glucose control:

Alterations to glycaemic control should be expected during end of life care.

Hyperglycaemia can result from stress response to severe illness, use of steroids, co-existent infection or rarely disturbed glucose metabolism seen with certain cancers (Pancreas).

Hypoglycaemia with consequent reduction of insulin requirement can result from weight loss, anorexia leading to malnourishment, renal and/or hepatic failure.

**Type-1 diabetes** is due to absolute insulin deficiency. Unless a patient is entering the final phase of life (embarking on LCP), continuation of insulin on a simplified regime is recommended.

**Type-2 diabetics** on oral hypoglycaemic agents may be able to discontinue treatment as a reduction in food and fluid intake leads to hypoglycaemia. Insulin treated patients with type-2 diabetes without symptomatic hyperglycaemia may be able to discontinue insulin therapy.

## **Guidance based on prognosis:**

The management of diabetes will differ for patients, depending predominantly on their prognosis. The difficulties of prognostication are well recognised and hence the guidance below should be adapted to each patient and the changing circumstance.

### **Management of Diabetes: terminal illness**

Prognosis: defined as less than 6 weeks

Equivalent to being on the End of Life Care Pathway (EOLCP)

Aim: Relax blood glucose targets, reduce unnecessary BG tests and simplify hypoglycaemic regime

Reduction in oral intake may require alteration to the existing hypoglycaemic therapy to avoid hypoglycaemia

### **Management of Diabetes in the Last days of life**

Prognosis: defined as days

Equivalent to being on the Liverpool Care Pathway (LCP)

Aim: Avoid distressing symptoms of diabetes (as a result of Ketoacidosis or hypoglycaemia) in the last stage of life and reduce invasive testing to the minimum level needed to achieve the aim.

Co-existing diabetes should not delay the use of the Liverpool Care Pathway for patients reaching the final days or hours of life.

The guidance for management of diabetes at end of life should complement the implementation of the Liverpool Care Pathway.

### ***Discontinuing Insulin in the dying patient***

A decision to stop insulin completely should generally be taken after discussion with the patient if still has capacity, and the family. It is generally appropriate to discontinue insulin when the patient has become irreversibly unconscious as part of the dying process (not because hypoglycaemia or DKA), and when all other life prolonging treatments have been stopped.

### **Steroid induced Diabetes mellitus**

Steroids (glucocorticoids) 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  $\geq 4$ mg/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.

### **Patient involvement:**

Whenever possible the patient with diabetes and his/her relative should be involved in care planning process. It can sometimes be difficult for them to adjust their thinking towards end of life diabetes care, as until now achieving good control would have been the message delivered by the diabetes multidisciplinary team. If they now have a life-limiting condition, guidance should be provided to maintain reasonable control of blood sugars with minimising the burden of treatment.

### **Management settings:**

End of life care for patients with diabetes can be provided by the community team and/or the palliative care team in the community, hospice or hospital setting. The diabetes specialist team will support their management and can be contacted for advice (see below). However if any patient develops a diabetic emergency, transferring care to an acute medical unit should be considered and discussed with the patient and/or relatives to ensure that an informed decision is made. On admission to hospital, the diabetes outreach team should be informed.

### **Management of Hypoglycaemia:**

Hypoglycaemia (BG<4 mmol/L) can manifest as sweating, tremor, anxiety, palpitations, confusion, aggressive/inappropriate behaviour, seizures or coma.

#### ***Patient conscious:***

- ◆ Give oral glucose in form of 4 teaspoons sugar in water, 120mls Lucozade, or Hypostop gel.
- ◆ Follow this with a longer acting carbohydrate such as toast, biscuits.

#### ***Patient unconscious:***

- ◆ IV glucose, 100mls of 20% dextrose – if intravenous access available
- ◆ 1mg Glucagon IM(S/C): if no intravenous access  
(Patients with marked cachexia or poor oral intake may not respond to Glucagon)

It may be necessary to commence 5% dextrose infusion if oral intake remains poor. Monitor BGs thereafter and reduce or discontinue hypoglycaemic agents. Contact diabetes specialist team for further advice.

### **Contact details:**

*Palliative Care Team:* New Cross Hospital internal ext: 5212 external 01902 695212

*Out of hour's Palliative advice via Compton Hospice* 0845 2255497

*Diabetes Specialist team at New Cross Hospital:* can be contacted through WUCTAS or directly on 01902 695310 (9:00 to 5:00 PM).

*Out of hours Diabetes Advice:* contact the on-call medical team at New Cross Hospital.