

DIABETES MANAGEMENT IN HOSPITAL

More than ever before in the history of diabetes, today physicians and patients have all the tools to achieve good sugar control and yet we see many untoward effects of uncontrolled diabetes. Diabetes is alarmingly rising in our community, its going to be one in every 4 persons in this country affected by diabetes by the end of 2025. As Indians we are all at risk of developing Diabetes and more so because we are South Indians. Though the diabetes management on outpatient basis is well known and practiced, the inpatient management is undertaken with less importance. Diabetes increases the risk for disorders that predisposes individuals to hospitalization, including heart attack, stroke, foot ulcers, kidney diseases, infections etc. People with diabetes get admitted in hospital more commonly for reasons other than diabetes. About 13-20% of all hospitalized patients are diabetic.

Causes of high blood sugar at hospital: -

1. Known diabetic with poor control of blood sugar.
2. Known diabetic whose control has worsened due to underlying medical/surgical condition.
3. Previously unknown diabetes diagnosed for the first time at admission.
4. Use of medications like steroids in patients with diabetes.
5. Stress induced high sugar.

High sugar should be aggressively controlled from the time of admission regardless of the patient's primary medical or surgical problem. Patients with diabetes spend an average of 4 days longer in hospital care than patients without diabetes and incur considerable health care costs. Importantly sugar control in hospital improves mortality, reduces length of stay, chance of infection, requirement of supportive measures like dialysis/ventilation and ultimately is cost effective.

It is a common observation that patients admitted to hospital otherwise known to be in good control, have sugars in the unacceptable range. The common causes for it are:

1. Stress response.
2. Change in diet and lack of physical activity.
3. Infection.
4. Concomitant Medications.
5. Transfer of treatment responsibility.
6. Priority of care shifts to present conditions.
7. Altered mental state in hospital patients.
8. Overenthusiastic relative making the patient eat more.
9. Errors in management of sugar by people not trained to treat diabetes.

Commonest among the medications that destabilize sugar are steroids. Clinical assessment of a patient with diabetes admitted in hospital is very important. Finding precipitating factor helps in achieving better diabetes control. Frequent monitoring of glucose by bedside Glucometer is the key. A treating doctor will be assessing diabetes,

the metabolic state (sodium, potassium, bicarbonate, kidney function) and chronic complications of diabetes.

Management of diabetes aims at good glucose control along with avoidance of low and high sugars, through out the hospital stay. Though published standards for glucose control in hospitalized patients are lacking, the recommendation is to keep the sugar between 80 – 140 before meal and 120 –180 at bedtime.

In a stressed situation the best choice will be natural therapy, which is Insulin, because of its quicker action, better predictability and convenience of adjustment. Most important factor for using insulin is the eating status of the patient. If the patient is eating he can be given insulin under the skin and if not eating insulin is to be given along with fluids given through veins. Regimen and dose needs to be tailored to suit the availability of facilities, experts to manage and the primary medical reason for admission.

Hospital admission can be utilized to teach the patient how to cope with diabetes, injection techniques, Glucometer etc. Low sugar following discharge from the hospital is not uncommon. A reasonably quick review with OPD is better. A patient at discharge should learn about what is diabetes, why to treat, principles of treatment and prevention of complication, target glucose levels for the individual, recognition, treatment and prevention of hypoglycemia, diet management, self monitoring of blood glucose, Insulin administration, sick day management and community issues related to diabetes. It should also be an opportunity for family members of the patient to learn regarding healthy eating habits, and management of diabetes.

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