

## **Clinical Perspective**

## CLINICAL APPROACH TO DIABETES MANAGEMENT

Diabetes is broadly divided into type 1 and type 2. Type 1 is inherited form of diabetes and the mainstay of treatment is insulin. It is recommended that rapid acting insulin should be used in small frequent doses to avoid episodes of hypoglycemia. The usual dose according to the body weight is 0.4-1.0 units/Kg/ day in divided doses. The sites for injecting insulin are upper arms, thighs, buttocks, abdomen etc. but the best place to inject insulin is abdomen.<sup>1</sup>

If insulin is injected in other sites it's absorption varies with the movement of that area thereby leading to increased chances of hypoglycemia. Injection sites needs to be changed on regular basis to avoid it's complications like lipoatrophy or lipohypertrophy etc.

American diabetes association has started to investigate the use of oral hypoglycemics along with insulin. The most important oral hypoglycemic agent is sodium glucose cotransporter inhibitor (SGLT2) which can be used along with insulin for type 1 diabetes. Surgical treatment for type 1 may be Islet cell transplantation.<sup>2</sup>

The other of Diabetes is type 2 diabetes related to excess body weight. The most important treat-

ment option is use of Metformin. which is helpful in reducing weight and controlling diabetes and decreaed chances of hypoglycemia. Insulin can be added to Metformin if sugar is not well controlled. The main side effect of Metformin is abdominal discomfort or deficiency of vitamin  $B_{12}$  leading to peripheral neuropathy. In renal disease it should be avoided.<sup>3</sup>

It is recommended that if diabetes is newly diagnosed and HbA1c level is more than 1.5% then dual therapy is preferred. If the patient has cardiovascular disease or is at high risk of developing atherosclerosis then sodium glucose co transporter 2 inhibitor or glucagon like receptor 1 agonist are advisable. The DDP-4 inhibitors, thiazolidinediones and sulfonylureas can also be used. The sulfonylureas and thiazolidinediones may lead to weight gain. while SGLT2 inhibitors reduces the weight.<sup>4</sup>

In renal disorders sodium glucose cotransporter 2 inhibitor are preferred.

If glucose levels are not controlled adequately by 2 oral hypoglycemics then insulin long or short acting may be added. It is recommended to evaluate the therapy every 3-6 months.

## REFERENCES

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