Diactin®

(Glipizide Tablet)

Description

Diactin (Glipizide) is an oral blood glucose lowering drug of the sulphonylurea class which causes hypoglycaemia by stimulating release of insulin from pancreatic β cells and by increasing the sensitivity of peripheral tissues to insulin.

Indications

Diactin (Glipizide) is indicated as an adjunct to diet for the control of hyperglycaemia and its associated symptomatology in the treatment of non-insulin-dependent diabetes mellitus (NIDDM type II) when diet modification has not been proved effective on its own. In certain patients who are receiving insulin, the concurrent use of Glipizide would allow a reduction in the daily dose of insulin.

Use of Glipizide must be viewed by both the physician and patient as a treatment in addition to diet and not as a substitute for diet or as a convenient mechanism for avoiding dietary restraint. Furthermore, short term administration may be required if diet control alone results in transient control of blood glucose level.

During maintenance, if satisfactory lowering of blood glucose is no longer achieved, use of Glipizide should be discontinued.

Dosage and Administration

Like any other oral hypoglycaemic agent, dosage of Diactin is not fixed and may be adjusted through periodic monitoring of blood glucose level.

Short term administration of Glipizide may be sufficient during periods of transient loss of control of blood glucose in patients, usually controlled well on diet.

In general, Diactin should be given approximately 30 minutes before a meal to achieve the maximum reduction in postprandial hyperglycaemia.

Initial dose : The recommended starting dose is 5 mg, given before breakfast. Geriatric patients or those with liver disease may be started on 2.5 mg.

Dosage adjustments : Dosage adjustment may be done at intervals of several days by an increment of 2.5-5 mg, as determined by blood glucose response. If response to a single dose is not satisfactory, dividing that dose might prove effective. The maximum recommended once daily dose is 15 mg. Doses above 15 mg should ordinarily be divided and given before meals of adequate calorie content. The maximum recommended total daily dose is 40 mg.

Maintenance : Some patients may be effectively controlled on a once daily regimen, while others show better response with divided dosing. Total daily dose above 30 mg have been safely given on bid basis to long term patients. Patients can usually be stabilized on a dosage ranging from 2.5 to 30 mg daily.

In elderly, debilitated or malnourished patients, and patients with impaired renal or hepatic function, the initial and maintenance dosing should be conservative to avoid hypoglycaemic reactions.

Patients receiving insulin :
Many stable non-insulin-dependent diabetic patients receiving Insulin may be safely placed on Glipizide if the physician decides to do so.

Patients receiving other oral hypoglycaemic agents :
As with other sulphonylurea, no transition period is necessary while transferring patients to Glipizide. Patients should be observed carefully for any possible hypoglycaemic effect due to overlapping of drug effects.

Contraindications
Diactin is contraindicated in the following conditions :

- Patients who are hypersensitive to Glipizide or any component of the product
- Juvenile onset diabetes
- Severe or unstable ‘brittle’ diabetes

- Diabetes complicated by ketosis and acidosis, major surgery, severe sepsis or severe trauma
- Severe renal, hepatic or thyroid impairment, co-existent renal and hepatic disease

Precautions

Hypoglycaemia : All sulphonylurea drugs are capable of producing severe hypoglycaemia. Proper patient selection, dosage and instructions are important to avoid hypoglycaemic episodes. Renal or hepatic insufficiency may cause elevated blood levels of Glipizide and the latter may also diminish gluconeogenic capacity, both of which increase the risk of serious hypoglycaemic reactions. Elderly, debilitated or malnourished patients and those with adrenal or pituitary insufficiency are particularly susceptible to the hypoglycaemic actions of glucose lowering drugs.
Patients should be instructed to take their meals regularly and not to exercise excessively without additional calorie intake.

Renal and hepatic disease : The metabolism and excretion of Glipizide may be slowed in patients with impaired renal and/or hepatic function. These patients may suffer from prolonged hypoglycaemia and appropriate measures should be instituted.

Loss of control on blood glucose : When a patient stabilized on any antidiabetic regimen is exposed to stress such as fever, trauma, infection or surgery, a loss of control on blood glucose may occur. At that time it may be necessary to discontinue Glipizide and administer Insulin.

The effectiveness of any oral hypoglycaemic drug including Glipizide, in lowering blood glucose to a desired level, decreases in many patients over a period of time, which may be due to secondary failure, i.e., progression of the severity of the diabetes or diminished responsiveness to the drug.

Drug Interactions

The hypoglycaemic action of sulphonylurea may be potentiated by certain drugs including non-steroidal anti-inflammatory agents and other drugs that are highly protein bound e.g., Salicylates, Sulphonamides,

Chloramphenicol, Probenecid, Coumarins, Monoamine Oxidase Inhibitors, and β adrenergic blocking agents. When such drugs are administered to a patient receiving Glipizide, the patients should be observed closely for hypoglycaemia. When such drugs are withdrawn from a patient receiving Glipizide, the patient should be observed closely for loss of control on blood glucose.

Certain drugs tend to produce hyperglycaemia and may lead to loss of control on blood glucose. These drugs include the thiazides and other diuretics, corticosteroids, phenothiazines, thyroid products, oestrogens, oral contraceptives, Phenytoin, nicotinic acid, sympathomimetics, calcium channel blocking drugs and Isoniazid. When such drugs are administered to or withdrawn from a patient receiving Glipizide, the patient should be closely observed for loss of control on blood glucose. Diabetic control may be altered also in patients treated with cyclophosphamide.

Side Effects

The majority of side effects have been dose related, transient, and responded to dose reduction or withdrawal of the medication.

Gastrointestinal : Gastrointestinal complaints were reported with the following approximate incidences like nausea, diarrhoea, constipation and gastralgia. They appear to be dose related and usually disappear on division or reduction of dosage.

Cholestatic jaundice may occur rarely with these kind of drugs and Glipizide should be discontinued if this occurs.

Dermatological : Allergic skin reactions including erythema, morbilliform or maculopapular eruption, urticaria, pruritus and eczema have been reported. They frequently disappear with continued therapy. However, if they persist, the drug should be discontinued.

Haematologic: Leucopenia, agranulocytosis, thrombocytopenia, haemolytic anaemia, aplastic anaemia and pancytopenia have been reported with sulphonylureas.

Metabolic : Hepatic porphyria and disulphiram like reactions have been reported with sulphonylurea.

Endocrine reactions : Cases of hyponatraemia and the syndrome of inappropriate antidiuretic hormone (SIADH) secretion have been reported with this and other sulphonylureas.

Miscellaneous : Dizziness, drowsiness and headache have been reported in patients treated with Glipizide. They are usually transient and seldom require discontinuation of therapy.

Use in Special Populations

Pregnancy : Glipizide should be used during pregnancy only if the potential benefit justifies the potential risk to the foetus. Prolonged severe hypoglycaemia (4-10 days) has been reported in neonates born to mothers who were receiving sulphonylurea (e.g., Glipizide) at the time of delivery. So, if Glipizide is used during pregnancy, it should be discontinued at least one month before the expected delivery date.

Lactation : Although it is not known whether Glipizide is excreted in human milk, some sulphonylurea drugs are known to be so. Breast feeding is not therefore recommended while taking this medication.

Children : In children safety and effectiveness have not been established.

Commercial Pack

Diactin® Tablet : Box containing 10 aluminium strips of 10 tablets. Each tablet contains Glipizide BP 5 mg.