DEPARTMENT OF INTERNAL MEDICINE

SECTION OF ENDOCRINOLOGY

PATIENT EDUCATION

HYPOGLYCEMIA (LOW BLOOD SUGAR) IN DIABETES

INTRODUCTION: Hypoglycemia occurs when levels of glucose in the blood are too low. A blood glucose below 60 mg/dl indicates hypoglycemia in most patients.

CAUSES: Hypoglycemia in a person with diabetes happens due to one or more of the following

* Takes too much insulin or drugs that cause insulin secretion
* Does not eat enough food or delayed meals or skips meals
* Exercises vigorously without taking a snack or without decreasing the dose of insulin beforehand
* Drinks moderate to excessive alcohol

SYMPTOMS:

During the early phase of a hypoglycemic episode:

* Sweating
* Tremor
* Hunger
* Anxiety

If untreated, symptoms can become more severe, and can include:

* Confusion
* Lack of coordination
* Weakness
* Lethargy
* Blurred vision
* Bizarre behavior
* Unconsciousness or seizure

PREVENTION: The best way to prevent hypoglycemia is to monitor blood glucose levels frequently, especially on sick days, and to be prepared to treat it promptly. The patient and his companion should learn and recognize the symptoms of hypoglycemia. Patients at risk for hypoglycemia (on insulin and/or oral hypoglycemic drugs) should carry with them sources of fast-acting carbohydrate, like glucose tablets and hard candy, or glucagon injectable.

TREATMENT: Treatment of hypoglycemia should not be delayed if the blood sugar monitoring equipment is not readily available. As soon as symptoms are noted, the patient should eat 10-15 grams of fast-acting carbohydrate (sources of simple sugar), such as ½ cup fruit juice or 6 pieces of hard candy. Foods that contain fat (like chocolates) or protein (like cheese) should initially be avoided, since these slow down absorption of glucose. The blood glucose should be measured again after 15 minutes and if it is below 60 mg/dl, or if symptoms persist, another 10 to 15 grams of fast-acting carbohydrate should be eaten. Avoid over correction of hypoglycemia. If the patient is unable to eat or is unconscious, glucagon injectable, if available, should immediately be given. If not, the patient should be brought to the emergency room of the nearest hospital.