

EFFIMET

Metformin 500/850

GENERIC NAME: Metformin Hydrochloride

PHARMACOLOGICAL CLASS: Biguanides

THERAPEUTIC CATEGORY: Anti-Diabetic

COMPOSITION AND PRESENTATION:

EFFIMET 500 TABLETS

Composition:

Each tablet contains Metformin HCl 500 mg

Presentation:

10 Tablets x 20 Blisters

EFFIMET 850 TABLETS

Composition:

Each tablet contains: Metformin HCl 850mg

Presentation:

10 Tablets x 10 Blisters

MECHANISM OF ACTION:

- Metformin acts by increasing the sensitivity of liver, muscle, fat, and other tissues to the uptake and effects of insulin. These actions lower the level of sugar in the blood. Unlike glucose-lowering drugs of the sulfonylurea class, e.g. glyburide, metformin does not increase the concentration of insulin in the blood and, therefore, does not cause excessively low blood glucose levels (hypoglycemia) when used alone.
- It directly stimulates peripheral anaerobic glycolysis in tissues and increases glucose removal from blood, Reduces hepatic gluconeogenesis, Slows glucose absorption from GIT and Reduces plasma glucagon levels.

INDICATION:

1. NIDDM (Non Insulin Dependent Diabetes Mellitus): When diet alone has failed, especially maturity onset NIDDM.
2. MODY (Maturity Onset Diabetes of the Young) (Unstable cases): Combination with insulin to give better and smooth blood glucose levels.

DOSAGE:

500 mg BD. Increase gradually at 1week intervals (depending on blood glucose levels and GIT discomfort)

850 mg twice to thrice times daily (depending on blood glucose levels).

Should be taken by mouth with meals.

[Max: 3 gm/day]

PHARMACOKINETICS:

- Has half life of 1.5-3 hrs.
- Does not bind to plasma proteins.
- Does not metabolize.
- Excreted by the kidneys as active compound.
- Has duration of action of 8-12 hrs.

ADVERSE EFFECTS:

The most serious side effect is lactic acidosis. The symptoms of lactic acidosis are weakness, trouble breathing, abnormal heartbeats, unusual muscle pain, stomach discomfort, light-headedness and feeling cold. Patients at risk for lactic acidosis include those with reduced function of the kidneys or liver, congestive heart failure, severe acute illnesses, and dehydration. The most common side effect of metformin is gastrointestinal upset. This includes diarrhea, cramps, nausea and vomiting, anorexia, abdominal discomfort. Others include dizziness, confusion, sweating, rash, weakness, and Vitamin B12 malabsorption. Therefore, it is recommended to take with meals.

CONTRAINDICATION:

1. Diabetic Coma
2. Renal or Hepatic disease
3. Alcoholism
4. CCF (Congestive Cardiac Failure)
5. Severe diabetic ketoacidosis
6. NURSING MOTHERS
7. Pregnancy

DRUG INTERACTIONS:

- Cimetidine, by decreasing the elimination of metformin from the body, can increase the amount of metformin in the blood by 40 %. This may increase the frequency of side effects from metformin.
- The other drugs are corticosteroids and oestrogens.
- The diuretics reduce the Metformin effects.
- The monoamine oxidase inhibitors and beta blockers increase the effects of Metformin.

ADVANTAGES:

- Since, it is an insulin sparing agent; it does not increase weight or provoke hypoglycemia.
- Has an advantage over insulin and sulfonylureas in treating hyperglycemia.
- Can be used in combination with sulfonylureas in Type2 diabetes in which sulfonylureas therapy alone is inadequate.

- Metformin is the only anti-diabetic drug that has been proven to reduce the complications of diabetes, as evidenced in a large study of overweight patients with diabetes (UKPDS 1998).
- These drugs lower blood sugar primarily by causing more of the body's own insulin to be released. It lowers the amount of sugar in your blood by helping your body respond better to its own insulin. It does not cause your body to produce more insulin. Therefore, it rarely causes hypoglycemia (low blood sugar) and it doesn't usually cause weight gain.

For further information, please contact:

Market Planning Department



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