International Journal of Academic and Applied Research (IJAAR)
ISSN: 2643-9603
Vol. 4, Issue 4, April – 2020, Pages: 67-68

Treatment of Diabetes with Sugar Lowers

Boboyorov Sardor Uchqun ugli

Student, Faculty of Medicine, Termez Branch of the Tashkent Medical Academy, Uzbekistan.
E-mail address: sardorbekboboyorov@gmail.com

Abstract: *Current evidence suggests that the number of patients with diabetes is increasing worldwide. Diabetes has been known as a disease for a long time. The clinical signs of the disease were first shown by Sels in 30-50 BC. By the year 1000 AD, the clinical signs of the disease were more fully studied by Abu Ali Ibn Sina, and later by Galen.*

Keywords: increase of cell sensitivity, glucose utilization in liver and muscle tissues, enhancement of endogenous insulin effect.

Introduction

These drugs have blood-lowering properties in the blood of non-insulin-dependent patients. Currently used drugs are mainly divided into two groups:

a) sulfonylureas
b) biguanides are more common than drugs belonging to sulfonylureas
Used: Butamide (orabet, tolbutamide), output from 0.25 and 0.5 g
prescribed 1-2 g per day; Bucarban (oranyl, carbutamide), 0.5 g is extracted, from 1-1, 5 g per day; Cyclamide (diaborol, arligal) 0.25 g, 0.5-0.75 g per day,
Chlorocyclamide (oradian), 0.25 g per tablet, 0.5-1.0 g per day, Glibenclamide
(maninyl, daonil, gliburideuglyukin) in tablets from 0.005-0.001 g to 0.01- per day
0.015 g, ie 10-15 mg: Gliclazide (predian), 0.08 g to 0.16-0.24 g per day
Recommended glipizide (minidiab) in tablets from 0.005-0.01 g per day to 0.005-0.04 g
is done.

Depending on the pharmacodynamic activity of sulfonylureas are conditionally divided into primary (tolbutamide, carbutamide, cyclamide, chlorpropamide) and secondary (glibenclabid, glyclazide, gluquidone) generation drugs.

The second in relation to sulfonylureas belonging to the first generation
Various side effects of sulfonylureas belonging to the generation are 50-100 times less. For this reason, sulfonylureas of the second generation are more widely used in practice.

Materials and methods

The mechanism of action of sulfonylureas is the stimulation of insular secretion from the pancreas, increasing the sensitivity of b cells, glucose utilization in liver and muscle tissue, enhancing the effect of endogenous insulin, improving the interaction of endogenous and exogenous insulin increase the potential effect, insulin receptors
based on the increase in the number of

Among the sulfonylureas, glibenclamide (maninyl, doanil) currently provides very good hypoglycemic benefits. The biological half-life is 24 hours, the therapeutic dose is 1, 25-20 mg, the maximum daily dose is 20-25 mg, it is recommended to take 2 or 3 times a day. Metabolism of the drug occurs mainly in the liver. The biological half-life of glipizide (minidiab) is 2-4 hours, the duration of hypoglycemic effect is 6-12 hours, 90% of the drug is excreted in the urine. Gliclazide (diabetes, predian) is completely absorbed in the pancreas, the maximum concentration in the blood for 2-6 hours after taking the drug
is correct. The daily therapeutic dose is 80-320 mg. The release form is 80 mg. The half-life in the body is 12 hours, 65% of the drug is excreted in the urine as a metabolite, 12% through the gastrointestinal tract.

Glycidone (glyurenorm) - differs from other drugs in this group by the fact that 95% is excreted through the gastrointestinal tract. But the sugar-lowering effect is weaker. Recommended in the early stages of nephropathy in non-insulin dependent diabetes mellitus. Release form 30 mg. from, the daily therapeutic dose is 30-120 mg. forms. Glimepiride (amaryl) belongs to the third generation of sulfonylureas. The half-life is longer than for other drugs. 1-2 mg per day. is ordered to drink 1 time from. The maximum daily dose is 4-8 mg. forms. Metabolism of the drug occurs completely in the liver.

Instructions and contraindications for the use of sulfonylureas. Insulin is not prescribed for patients with normal or overweight diabetes mellitus. Cases of ketoacidosis, precoma and diabetic coma in patients are absolute contraindications. Pregnancy and lactation, the addition of infectious diseases, the appearance of trophic ulcers on the skin, the development of renal and hepatic insufficiency, decreased body weight are temporary or permanent contraindications to the use of sulfonylureas.

The second group of oral diuretics is biguanides. The group of biguanides butylbiguanides (buformin, adebit), dimethylbiguanides (metformin) and phenylbiguanides (phenformin) is distinguished. These drugs do not alter insulin secretion

and do not work without insulin secretion. Metformin is excreted unchanged by the kidneys after ingestion and does not form a metabolite in the body. After taking phenformin, 5% is excreted by the kidneys, the rest is metallized in the liver. This is it

Long-term use of drugs has a positive effect on lipid metabolism (lowers cholesterol, triglycerides). Biguanides enhance glucose transport from the cell membrane. Increases the amount of lactate, pyruvate, alanine due to the weakening of gluconeogenesis. This is the basis for the development of lactic acidosis.

For this reason, most drugs of the biguanide group are out of production and are rarely used in practice.

Conclusion

In Uzbekistan, as in other countries, metformin (siafor, glycophage, glyformin) from biguanides is used in practice. The biological half-life of metformin is 1, 5-3 hours. Release form 500, 850, 1000 mg. and. The daily therapeutic dose is 1-2 g.

Insulin-dependent diabetes mellitus, ketoacidosis, kidney, liver, heart failure, alcoholism, lung disease with respiratory failure, peripheral vascular damage (gangrene), old age, young biguanide are contraindicated. Cases of pregnancy and lactation, infectious diseases such as sulfanylureas

It is also not recommended to take biguanide during operative measures.

References

1. Balabolkin M.I. "Endocrinology", Moscow, 2000
2. Baranov V.G. "Rukovodstvo poklinicheskoy endocrinologii", Leningrad, 1973
3. Ismoilov S.I. "Hyperparathyroidism, diagnosis and treatment", Tashkent 2000
4. Potyomkin V.V. "Endocrinology", Moscow, 1999
5. Semple C. G., Thompson J. A., Teasdale G. M. // Transsphenoidal
6. microsurgery for Cushing's disiace. Acta Endocrinologica. Copenh. Vol. 113 - p. . 5-11.