

Diabetes II

Oral treatment – Swedish recommendations

CME 20th of April 2023 in the Kwanza Sub-County Hospital

Background

- The cause of type 2 diabetes is insulin resistance.
- All patients are given oral treatment with metformin from the start in addition to lifestyle advice; stop smoking, weight loss, dietary advice, physical activity.
- Type 2 diabetes is a progressive disease. At least every year, therefore, the drug treatment must be reassessed.
- After 10-15 years with type 2 diabetes, insulin production in the beta cells of the pancreas decreases. The patient then needs insulin substitution.

Recommended goals

- HbA1c \leq 45 mmol/mol (6,3 %).
- The highest possible **Time In Range** (TIR) is sought, i.e. preferably P-glucose 4-10 mmol/l at least 70% of the day.
- Fasting P-glucose 4-6 mmol/l and P-glucose after meal \leq 8-9 mmol/l.
- To minimize the risk of hypoglycaemia, some patients have to settle for a target slightly higher. The target values are more important in younger patients.
- Visits to a nurse or doctor should be offered for mapping risk factors for diabetes, cardiovascular disease and smoking as well as checking weight and/or waist circumference, HbA1c, lipid status and blood pressure.
- The patient should be offered a visit in one year, and then follow-up checks every 1-2 years.

Oral antidiabetics

1. METFORMIN

Reduces insulin resistance. Low risk of hypoglycaemia.

Contraindications: Severe heart failure, liver failure, kidneys: below 45 ml/min, alcoholism, catabolic patient.

First-line treatment
500 mg x1 to
500 mg x4 or 1000 mg x2

2. SULFONUREIDES (SU): Glibenklamid, Glimepirid, Repaglinid

Works by releasing more insulin from the pancreas. Should not be combined with insulin.

Not/seldom used in Sweden, but sometimes abroad

3. AKARBOS

Reduces the absorption of disaccharides in the gut after a meal. Suitable for obese individuals.

Not/seldom used

4. GLITAZONER: Pioglitazon

Addition to metformin in case of insufficient effect in severe obesity with high insulin resistance.

Not/seldom used

Oral antidiabetics

5. DPP4-INHIBITORS: Sitagliptin, Linagliptin

Inhibits the breakdown of GLP-1 (glucagon-like peptide 1). Relatively few side effects.

In addition to Metformin.

1 tabl x1

6. SGLT2-INHIBITORS: Dapagliflozin, Empagliflozin, Canagliflozin

Increases the secretion of glucose in the urine.

In addition to Metformin or as monotherapy.

1 tabl x1

7. GLP1-ANALOGUES: Exenatide (i.v. BD), Liraglutid (i.v.), Semiglutide (p.o.)

Stimulates insulin production. Reduce the amount of glucose released from the liver. Slow down the digestion of food. Reduces appetite and can lead to weight reduction.

In addition to Metformin or as monotherapy.

i.v. – not suitable for all patients

Semiglutide now as oral tabl x1.

Expensive

However,

After many years insulin production in the pancreas decreases and insulin substitution is needed.