

The GeriJournal



Volume 20, Number 1
January 2025

A publication of GeriatRx Pharmacy

Ozempic or Metformin for Dementia Prevention?

Diabetics are getting all the good drugs these days. Fortunately, they're willing to share. SGLT2s (gliflozins) eliminate glucose but also have amazing cardiac and kidney benefits. Ozempic® also got its start by lowering glucose levels. Now, half the world seems to take it for weight loss. It also prevents heart attacks and strokes while slowing declining renal function. How about Ozempic® for fertility? That's not an LTC indication, but early evidence is promising.

An exciting, new potential indication for GLP-1 drugs like Ozempic® is dementia prevention. Studies, *EVOKE* and *EVOKE+*, will have preliminary results soon. Early research shows less amyloid and tau protein in rat brains, and better neuron function.

Metformin is also no slouch as a cure-all. It's our #1 oral diabetes drug (though the gliflozins are coming on fast). It's been used to treat heart disease, PCOS-linked infertility, cancer (with poor results), etc.,

and dementia. In a massive meta-analysis of 20 studies, metformin users were 20-25% less likely to develop dementia than non-users. A knock against the study was that one group compared metformin to older oral drugs like glyburide, Actos®, and Avandia®. Newer agents, e.g., GLP-1s, might do a better job of protecting the brain. Maybe Ozempic + metformin is the best way to keep the brain sharp.

Metformin for Weighty Antipsychotics

Antipsychotic meds cause weight gain. Olanzapine and clozapine are the worst offenders. Quetiapine and risperidone present medium risk. Taking metformin with the first dose of antipsychotic reduces weight gain by 4.03 Kg (9 lb.) relative to controls. That is the basis for a new guideline published in the *Schizophrenia Bulletin*.

Metformin should be initiated when olanzapine or clozapine are started. If a resident has CV risk or a BMI between 25 and 30, start metformin with risperidone or quetiapine. Add metformin if the resident gains more than 3% body weight after starting the antipsychotic if it wasn't added initially.

Metformin dosing starts at 500mg daily for 2 weeks, then 500mg twice daily for 2 weeks, followed by biweekly increases to 1Gm twice daily. Dosing

should be reduced in residents with renal impairment.

GLP-1 use in conjunction with antipsychotics has not been studied extensively. GLP-1s can be considered for residents with BMIs > 30, obstructive sleep apnea, or cardiometabolic diseases. Unfortunately, Ozempic®, the only ODB-listed GLP-1 drug, would not be covered for this indication.

Libre and Imaging

Freestyle Libre® sensors can now be worn during CT scans, X-rays, and most MRI procedures. There was concern that energy from these scans would damage the sensors, resulting in incorrect readings.

Abbott has done extensive testing, and most scans are OK. MRIs are complicated. Low-energy MRIs (1.5T) are safe for one hour, while high-energy MRIs (3T) must be limited to 12 minutes, followed by a 2-minute cooling off period before the next scan.

Sleepy Mirtazapine

Sedation is a valuable side effect of mirtazapine. A Dutch study confirmed that low-dose (7.5mg) mirtazapine 30 to 120 minutes before bedtime improved time to sleep and time asleep relative to placebo. The benefit was significant at 6 weeks but not at 12. The drug is useful for short-term insomnia treatment.

*Prepared by Randy Goodman
Certified Geriatric Pharmacist*