Recommendation

25. In adults with type 2 diabetes mellitus, especially those 65 years and older, we suggest prioritizing drug classes other than insulin, sulfonylureas, or meglitinides to minimize the risk of hypoglycemia, if glycemic control can be achieved with other treatments.
(Weak for | Reviewed, New-added)

26. In adults with type 2 diabetes mellitus who have co-occurring cognitive impairment or risk of falls, there is insufficient evidence to recommend for or against specific treatment strategies for glucose lowering to reduce the risk of harms.
(Neither for not against | Reviewed, New-added)

Discussion

Older adults with T2DM represent a large and varied group of individuals, with some experiencing healthy aging and others having comorbidities, frailty, and limited life expectancy. It is accepted that lower HbA1c over time confers a reduced risk of microvascular complications, but these benefits are often realized over many years. Thus, glycemic management plans should consider the risks and benefits of diabetes treatments in the setting of an individual's unique characteristics and goals of care. In addition, older adults with concomitant conditions that limit life expectancy should be evaluated for polypharmacy, hypoglycemia, hospitalization, and fall risks.

Averting adverse outcomes that result from potential overtreatment is particularly important in older adults with cognitive impairment, dementia, or risk of falls. Treatment strategies to control hyperglycemia and minimize hypoglycemia have direct and tangible benefits for such patients. Therefore, we sought evidence on effective and safe glucose-lowering strategies in adults with T2DM and cognitive impairment or at risk of falls. The systematic evidence review, however, did not locate reports in which investigators recruited patients with T2DM and these higher-risk features. Eighteen studies were identified that evaluated diabetes treatments in patients with T2DM, age ≥65 years, or who were overweight or obese but without age-related conditions such as cognitive impairment or risk of falls. There were seven SRs and 11 randomized controlled trials. Many pharmacologic agents were studied in direct comparisons, including monotherapies and combinations of agents.

To overcome the absence of studies among the target populations, we found that predictive modeling suggested that factors such as older age, overweight, or obesity increase the risk of cognitive impairment or falls. Being overweight increases the risk of falls in women with T2DM by at least three-fold,(143) and each decade of age increases the risk of cognitive impairment by two-fold.(144) Other factors that can increase fall risk were considered, including impaired balance, reduced gait speed, peripheral neuropathy, multiple comorbid conditions, and lower extremity pain, but studies with these factors were also not identified to address the interventions of interest. Accordingly, the systematic evidence review focused on treatment strategies among