Individualizing Treatment Plans for Older Adults With T2DM

Key Slides from the Interactive Newsletter
Hypoglycemia in Older Adults

- Particularly dangerous, especially for those on insulin or secretagogues
  - Ability to sense hypoglycemia declines with age
  - Counter-regulatory response to hypoglycemia is impaired with age
  - Older adult brain is more sensitive to the insult of hypoglycemia

- Patient education regarding symptoms and treatment of hypoglycemia can help prevent severe episodes with associated sequelae
Intensive Therapy Is Associated With Increased Incidence of Severe Hypoglycemia

ADVANCE\(^1\)
Per 100-patients per year

\[ P < 0.001 \]

\[
\begin{array}{ll}
\text{Standard} & 0.4 \\
\text{Intensive} & 0.7 \\
\end{array}
\]

ACCORD\(^2\)
Per 100-patients per year

\[ P < 0.001 \]

\[
\begin{array}{ll}
\text{Standard} & 1.0 \\
\text{Intensive} & 3.0 \\
\end{array}
\]

VADT\(^3\)
Per 100-patients per year

\[ P < 0.01 \]

\[
\begin{array}{ll}
\text{Standard} & 4.0 \\
\text{Intensive} & 12.0 \\
\end{array}
\]

Severe Hypoglycemia Increases CVD and Microvascular Complications in Older Adults

Medications Most Commonly Associated With Emergency Admissions in Patients >65

Choosing Between Treatment Options

- Efficacy
  - Fasting vs postprandial hyperglycemia
- Safety and tolerability
  - Hypoglycemia risk
- Comorbidities
  - Chronic kidney disease
  - Cardiovascular disease
  - Obesity
  - Other (eg, fall risk, cognitive function, etc.)
- Patient preference
Hypoglycemia Risk and Considerations for Therapeutic Selection

- Minimize risk by avoiding medications that cause hypoglycemia
- Ask patients about history of hypoglycemic events; adjust therapy accordingly
- Educate patients to enable them to recognize hypoglycemic events
Case: Anita

- 74-year-old Hispanic woman
- Admitted several times recently to the hospital for acute delirium
- Medical problems
  - Degenerative joint disease
  - Osteoporosis
- Surgical history: hysterectomy
Case (cont’d)

- Personal history: smoker, 40-pack years
- Family history: mother had diabetes; father had cerebral vascular accident
- Social history: lives at home
- Recent medical problems: temporal arteritis
- Medications: acetaminophen, glyburide, calcium, vitamin D, raloxifene
Case (cont’d)

- History of present illness: 3 hospital admissions in last month for altered mental status related to hypoglycemia; each time treated in hospital with IV dextrose and sent home after improvement in mentation.
- Detailed history: Diagnosed with diabetes about 3 months ago (possibly steroid induced, from treatment for temporal arteritis 6 months prior).
Case (cont’d)

• After 5 months, steroids were discontinued but glyburide was not.
• Because of language barriers, a detailed history was not taken.
Case (cont’d)

• Follow-up:
  – 6 months after discontinuing glyburide, no further hypoglycemic episodes

• Best practices message:
  – Need for detailed history and frequent reassessment of medications to minimize unnecessary medications (polypharmacy)
Case Discussion

- Sulfonylureas versus insulins
- Communication between care providers
- Overcoming language barriers
- Role of pharmacist on care team
- Side effects of antibiotics
Case: Casey

- 84-year-old white man with T2DM and recent CVA
- Returned to LTC facility from hospital with blood sugars in the 400 mg/dL range
- Prior to admission his A1c was 8.2
- Receiving both prescribed insulin and sliding-scale insulin as directed
- LTC’s on-site clinician is concerned about potential infectious causes (UA, CBC, CXR) and an antipsychotic medication prescribed in the hospital
Case (cont’d)

What are some considerations when caring for patients returning to a LTC facility from the hospital?

- Transition away from sliding scale insulin
- Obtain hospital records/ensure appropriate transfer protocols
- Vary treatment plans depending on type of DM, concurrent disease, and individual needs
- Define BG target ranges, which should be realistic and safe
Case (cont’d)

- Dietary needs vary for individuals with DM and dietary changes may be reflected in BG levels
- Educate patient/family about food gifts, parameters for diabetes medications, timing with meals, and activities
Case (cont’d)

- No infectious cause identified
- Exercise program initiated
- Antipsychotic discontinued—lack of indication
- Patient passed swallow study—discontinued thickened liquids
- Glucose control improved with reduced carbohydrate intake
- Insulin therapy transitioned to basal