Health Awareness.

Low Blood Glucose Can Be Highly Dangerous

(NAPS)—If you or someone you care about is among the more than 29 million Americans living with diabetes—of the additional 86 million who are at risk for developing the disease—there's something you should know.

The Problem

One complication of diabetes, hypoglycemia, occurs most often in people taking medications as treatments that may raise insulin levels too high, which can cause blood glucose levels to drop too low. Hypoglycemia can be dangerous and, depending on the severity, can lead to various symptoms including dizziness, confusion, anxiety, seizure or loss of consciousness.

It's a particular problem in hospitalized patients. Low blood sugar, also known as hypoglycemia, is associated with increased short- and long-term mortality risk, per a new study published in the Endocrine Society's Journal of Clinical Endocrinology & Metabolism.

To increase awareness of hypoglycemia in persons with diabetes mellitus and to foster initiatives focused on reducing its incidence, the Endocrine Society established the Hypoglycemia Quality Collaborative (HQC), a coalition of medical specialty societies, payers, industry, patient advocates, diabetes educators and research organizations.

Seeking Answers

"Hypoglycemia is common among hospitalized patients with and without diabetes mellitus," explained the study's senior author, Amit Akirov, M.D., of Rabin Medical Center in Petah Tikva, Israel. "Our findings suggest that hypoglycemia, whether insulin related or noninsulin related, is associated with short- and long-term mortality risk."

The study included nearly 3,000 patients with hypoglycemia, defined as blood glucose levels < 70 mg/dL, during hospitalization at a 1,330-bed, university-affiliated medical center. Researchers evaluated medical records and the hospital's mortality database to investigate the association between hypoglycemia and mortality in hospitalized patients. They found that for patients with hypoglycemia, end of follow-up mortality was 31.9 percent.

Mortality risk was higher in insulin-treated patients with moderate hypoglycemia (40–70 mg/dL), compared to patients without insulin treatment with similar glucose values. However, with severe hypoglycemia (<40 mg/dL), the increase in mortality risk was similar with insulin-related and noninsulin-related hypoglycemia. Cause of admission did not affect the association between glucose levels and mortality.

"These data are a timely reminder that hypoglycemia of any cause carries



Endocrinologists and other scientists are working on ways to help people with diabetes avoid the risks of low blood sugar.

the association with increased mortality," said Akirov.

The new HQC blueprint provides recommendations and tactics in multiple strategic areas including reducing gaps in care, advocating for increased focus on hypoglycemia, and improving quality of care for patients who experience hypoglycemia.

Suggested Solutions

Recommendations include:

- Federal government should increase funding for research at the National Institutes of Health and the Centers for Disease Control and Prevention to reduce gaps in evidence related to hypoglycemia prevention and management;
- Insurance companies and healt care providers should look for ways to incorporate continuous glucose monitoring data into clinical decision making to prevent and manage hypoglycemia in high-risk individuals;
- Diabetes educators, patient advocacy groups and social workers should engage patients and caregivers regarding self-management techniques as well as protective rights in the workplace; and
- Hypoglycemia-specific education should be targeted by age and gender, sensitive to the amount of time a patient has available, and include training from behaviorists, nurses, dietitians and exercise physiologists.

Endocrinologists are at the core of solving some of the most pressing health problems of our time, from diabetes and obesity to infertility, bone health, and hormone-related cancers. The Endocrine Society is the world's oldest and largest organization of scientists devoted to hormone research and physicians who care for people with hormone-related conditions. The Society, which is celebrating its centennial, has more than 18,000 members, including scientists, physicians, educators, nurses and students.

Learn More

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