

Editorial

Hypoglycemia: A Medical Emergency

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Editor

Now, we're all well aware of hyperglycemia, the deadly killer when it comes to Diabetes Mellitus, but its antagonist remains in medical obscurity, even when hypoglycemia itself can be considered to be on par with hyperglycemia, if not ahead of it in terms of sheer lethality.

Type 2 diabetes patients with dangerously low blood sugar levels may be at increased risk for cardiovascular disease, according to a new study. Given their findings, "less stringent glycemic targets may be considered for type 2 diabetic patients at high risk of hypoglycemia (severely low blood sugar)," the researchers said. A dangerously low blood sugar level is often classified as a medical emergency. Previous observational studies have reported a link between severe hypoglycemia and cardiovascular disease risk, but the association remains controversial. In this study, researchers from the United States, Japan and the Netherlands analyzed the findings of six studies that included a total of more than 903,000 type 2 diabetes patients.

The review revealed that 0.6 percent to 5.8 percent of patients developed severe hypoglycemia during one to five years of follow-up. Overall, these patients had a 1.56 percent increased risk of developing cardiovascular disease, according to the study, which was published July 30 in the online journal BMJ.com. The results suggest that severe hypoglycemia is associated with a two-fold increased risk of cardiovascular disease, the researchers said. Because of this, preventing severe hypoglycemia in people with type 2 diabetes may be important to prevent cardiovascular disease, the researchers said in a journal news release. The link between severe hypoglycemia and increased cardiovascular disease risk has previously been explained by patients having one or more other serious illnesses, but this is an unlikely explanation, the researchers said. They said the incidence of serious illnesses would need to be "unrealistically high" among patients who developed severe hypoglycemia, and the link between serious illnesses and cardiovascular disease would have to be "extremely strong."

These remain just a few preliminary researches, but the link, albeit controversial, has been established that

hypoglycemia in a Diabetic patient may actually be more harmful towards their cardiovascular system as compared to the Diabetes and hyperglycemia itself.

Not to despair though, A new sensor attached to an insulin pump helps prevent dangerously low blood sugar levels in patients with type 1 diabetes while they sleep, a new study finds. The new pump automatically stops delivering insulin when the sensor finds blood sugar levels have reached a pre-set low level, and it reduced overnight episodes of low blood sugar (hypoglycemia) by a third, the researchers report. According to the researchers, hypoglycemia is the biggest barrier to achieving the blood sugar control they want to get to prevent eye disease, kidney disease, amputations and heart disease. The generalised effects of hypoglycemia can range from dizziness to seizures to coma and death, and it is one aspect of disease that has patients scared to death just wondering whether they will be having a good night's sleep or whether they will be having a major problem in the night.

This may also be another step to creating a so-called "artificial pancreas" for people with type 1 diabetes, who cannot make insulin on their own. Although this device has been used in Europe, the new study is a move toward getting the device approved by the U.S. Food and Drug Administration, and eventually the rest of the world.

Considering the use of such a device proves to be successful in Type I Diabetics, it won't be a far fetched idea to produce something along the same lines for Type II Diabetics who are at a risk of going into severe hypoglycemia. The future might be sweet after all.

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