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Favorable Glycemic Control with Once-Daily Insulin Degludec/Insulin Aspart after Changing from Basal Insulin in Adults with Type 2 Diabetes (*Endocrinol Metab* 2019; 34:382-9, Han Na Jang et al.)

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I read with interest the article by Jang et al. [1], entitled "Favorable glycemic control with once-daily insulin degludec/insulin aspart after changing from basal insulin in adults with type 2 diabetes." In the absence of high-level clinical evidence for insulin users in Korea, the study provided new insights for clinical researchers studying diabetes mellitus (DM).

In this study, the authors examined the clinical outcomes of patients recruited from three referral hospitals after replacing their basal insulin with insulin degludec/insulin aspart (IDegAsp). The medical records of a total of 80 subjects were investigated. The mean age of the subjects was 67.0 years, their duration of DM was 18.9 years, and their average hemoglobin A1c (HbA1c) was 8.7%. Interestingly, the authors compared subjects' clinical response in terms of the difference between predicted fasting plasma glucose (p-FPG) and measured fasting plasma glucose (m-FPG) based on previous studies [2]. The clinical effects of switching to IDegAsp showed a significant relationship with the difference between p-FPG and m-FPG. In particular, subjects using high doses of insulin who had low fasting C-peptide levels showed a better HbA1c reduction in response to IDegAsp therapy. Based on these findings, the authors argued that treatment with IDegAsp instead of basal insulin could be a clinically useful treatment strategy in people with severe insulin deficiency and high blood glucose variation.

I think that the findings of this study are quite interesting. Indeed, IDegAsp once a day can be a good treatment strategy for patients with type 2 diabetes who have severely deteriorated prandial insulin secretion and can be of practical help without requiring a higher number of injections. However, a limitation of this study is that it was based on a retrospective analysis of patients' medical records. Another weakness is that the number of recruited subjects was not large and the observation period was not long. In addition, it is unclear whether p-FPG is an accurate indicator of patients' clinical characteristics. Finally, new drugs such as weekly glucagon like peptide-1 (GLP-1) agonists and fixed-ratio combinations of basal insulin and a GLP-1 agonist have been introduced. These drugs are known not only to effectively lower postprandial glucose, but also to help improve cardiovascular outcomes [3,4].

Therefore, I think we need a more in-depth look at the clinical implications of the authors' findings. I would be curious to hear the authors' opinions on these issues.

Thank you.

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CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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