CAPSULE COMMENTARIES

Capsule Commentary on Patrick et al., Trends in Insulin Initiation and Treatment Intensification among Patients with Type 2 Diabetes

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This study by Patrick et al.[1] investigated the pattern of insulin initiation, as well as treatment intensification, among patients with type 2 diabetes compared to American Diabetes Association (ADA) and European Association for the Study of Diabetes (EASD) guidelines. Although this observational study may not be representative of the general population, as the 7,932 studied patients were derived from a single commercial insurance company from a single state, the reported data are relevant to the treatment of type 2 diabetes for both primary care physicians and specialists.

The main finding was that insulin was frequently initiated without the withdrawal of sulfonylureas or meglitinides, as recommended by the guidelines. Moreover, sulfonylureas were started in 29 % and meglitinides in 11 % of patients following insulin initiation. This is concerning, given the important risk of hypoglycemia when combining these antidiabetic agents. Furthermore, insulin and hypoglycemic agents represent, respectively, the number two and number four causes of emergency hospitalizations in older Americans,[2] and hypoglycemia was thought to be the cause of excess death in the ACCORD trial.[3]

Only one-third of patients benefitted from treatment intensification after insulin initiation, suggesting suboptimal care. However, HbA1c levels were not available. Finally, a quarter of patients discontinued insulin following initiation. This might reflect either poor compliance, possibly due to lack of knowledge or side effects, or the transient need for insulin, such as during steroid use or severe illness.

It is uncertain whether endocrinologists would do better; in this study, only 17 % of patients were seen by specialists,[1] though there is data that endocrinologists are more likely to intensify diabetes treatment and initiate insulin in type 2 diabetic patients.[4] This study suggests that a significant portion of type 2 diabetics being initiated on insulin are continued on hypoglycemic agents, notably sulfonylureas and meglitinides, a potentially hazardous practice and in discordance with ADA/EASD guidelines.[5] Whether this reflects under-appreciation of the hazards of hypoglycemia, inadequate training and knowledge, or some other factor is unknown and deserving of further research.

Conflict of Interest: *The author declares that he does not have a conflict of interest.*

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