
Dakota Diabetes Coalition is proud to offer a regular column on diabetes and related concerns every other Friday.



Dr. Johnson is a family practice doctor in Grand Forks with a special interest in diabetes -- and a special knack for writing. As a member of the Dakota Diabetes Coalition, he has generously made himself available to answer questions through our listserv. If you have comments, or questions for Dr. Johnson to address in future columns, please contact gailhand@q.com

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<http://www.ndhealth.gov/diabetescoalition/>

Keep on truckin'... with insulin

Diabetes and safe-over-the road driving

Two weeks ago, I covered driving and diabetes, and the role of insulin therapy for everyday drivers. For commercial drivers, it's more complicated.

People with diabetes who drive for a living face some special challenges. However, the regulatory environment has evolved over the last several years, and just like all patients with diabetes, new treatment options make certain situations better.

Starting insulin therapy for type 2 patients has become much less burdensome due to improved insulin products, particularly basal insulins (glargine and detemir) that have less hypoglycemic potential. The improvement in insulin pens has also enhanced patient acceptance.

Although there is no set guideline for when to start type 2 patients on insulin, most providers would strongly consider it for the patient on two oral agents who is not achieving target glycemic control.

Current regulations

Commercial drivers are regulated by Federal Motor Carrier Safety Administration guidelines. Despite the persistent belief that federal

regulations do not allow commercial drivers to use insulin, they have been allowed to get waivers to do that since 2005.

Here's the rub. They must first demonstrate "adequate individual disease management skills," which typically means taking a break from their livelihood. Drivers with type 2 must demonstrate that they can manage blood sugars safely while on insulin for one month. Those with newly-diagnosed type 1 must demonstrate blood sugar control over two months.

This typically means adequate self blood glucose monitoring, as well as an A1C between 7% and 10%. Before a waiver is granted, the agency will also consider any evidence of hypoglycemia related to driving, as well as hypoglycemia unawareness.

To meet the test of one month of successful insulin use and an A1C between 7 and 10, it usually means that type 2 patients must take a hiatus from interstate driving.

By the way, in the olden days, over-the-road interstate drivers had to prove that they could safely handle insulin use *for three years* before they were legally allowed back on the road! Later the test period was dropped to 3-months and now it's down to a single month. However, even requiring a 1-month hiatus from the road can mean that commercial drivers won't start insulin, even though it would be better for their health.

The paycheck trumps treatment!

Nearly all patients with type 2 diabetes will require insulin at some point due to progressive beta cell dysfunction and destruction. Usually, this occurs more than five years after diagnosis, but it varies from individual to individual. It is not unusual to encounter type 2 commercial drivers who may use 3 or even 4 oral agents in an attempt to control diabetes without insulin.

Byetta with sulfonylureas may cause lows

Occasionally, non-insulin therapies may be beneficial prior to starting insulin. Exenatide (Byetta) is an injectable GLP-1 analog that may help, and is acceptable for commercial driving, without the necessity of a waiver. However, it is important to note that hypoglycemia may still occur when this agent is combined with sulfonylureas, and exenatide is no substitute when insulin is clearly indicated. Nevertheless, this agent

or the novel DPP-IV inhibitor sitagliptin (Januvia) may be useful in select patients.

When treating the commercial driver with type 2 diabetes, it is important that lifestyle recommendations to improve blood sugars take into account what drivers do for a living: sit for long stretches, occasionally forgoing sleep in order to meet deadlines. Diabetes educators and dietitians should customize their advice to address truckers' everyday routines and requirements.

With good management practices to help slow the natural progression of type 2 diabetes, truckers can detour the diabetes complications that wait for them on the road ahead.

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[Part 2 Driving and diabetes, Dr. Johnson's Column #29, Sept. 5, 2008](#)
