

Depression, Diabetes, Hepatitis C: A Triple Threat

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TUCSON, ARIZ. — Depression is a risk factor for poor glycemic control in diabetic patients infected with hepatitis C, according to an analysis of data from a preliminary cohort study in 462 patients.

The association between depression and glycemic control is noncausal at this point, but warrants further study and attention by family physicians, said Dr. Anthony Valadini, research director of the Greater Lawrence Family Health Center, Lawrence, Mass.

Type 2 diabetes and depression are common comorbidities among patients infected with the hepatitis C virus (HCV). Interferon, a major component of HCV therapy, often is a cause of depression. But physicians have been hesitant to prescribe antidepressants in this population because of what Dr. Valadini believes are unfounded fears of liver complications.

"This is a group that is miserable," Dr. Valadini said during a poster presentation at the annual meeting of the North American Primary Care Research Group. "In some series, you will get up to 58% of people who are depressed, so it's really cruel to treat them for hepatitis C and not offer them therapy for their depression."

Dr. Valadini and colleagues used data from the hepatitis C registry to identify 462 patients with hepatitis C, aged 21 years or older, who had visited an inner-city community health center between April 2003 and April 2005.

Patients were coded as either depressed or diabetic if these diagnoses were found in their medical records. The most recent hemoglobin A_{1c} (HbA_{1c}) value was used for calculations. They compared hepatitis-positive diabetes patients with and without

depression by using chi-squared statistics, after categorizing HbA_{1c} results into tertiles representing levels of glycemic control (< 7%, 7%-9.5%, > 9.5%).

Overall, 139 patients (30%) were depressed and 83 (18%) had type 2 diabetes. Of the diabetic patients, 28 (34%) were depressed. Mean HbA_{1c} for the diabetic plus depressed group was 7.5%, compared with 7.2% for the nondepressed diabetic group. The mean ages were similar (54 years vs. 55 years).

Although there were more men than women in both the depressed and nondepressed groups, there were no significant differences in their proportions across the glycemic control categories. All of the diabetic patients received education on glycemic control and were given access to dietitians and diabetes nurse educators, Dr. Valadini noted.

Full data available on 26 patients in the depressed group show that 12 patients (46%) at the target HbA_{1c} of < 7%, where-

as the nondepressed diabetics were at target in 31 of 52 (60%) cases, the authors reported. This difference was significant when tested with chi-squared statistics.

At the center, patients with hepatitis are screened for multiple comorbidities and are treated with SSRIs if depressed. The rule of thumb is to consult with a gastroenterologist regarding the decision to start medications or not if transaminases are more than twice the upper limit of normal, Dr. Valadini said. ■

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*ADA goal is A1C <7%.

[†]74% of patients preferred NovoLog® Mix 70/30 FlexPen versus 9% who preferred insulin lispro mix 75/25 prefilled pen for overall ease of use. 17% of respondents had no preference.

[‡]Subject to program details included in the Satisfaction Guarantee Patient Folio.

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QD (dinner)	41%*	21%*
BID (breakfast, dinner)	70%*	52%*
TID (breakfast, lunch, dinner)	77%*	60%*
Total ITT (intent-to-treat) population	77/100	60/100

*Cumulative percent of patients achieving A1C goals.

48-week, open-label, observational study in 100 patients 18 years and older with type 2 diabetes for ≥12 months and A1C levels between 7.5% and 10%. Patients had been previously treated on stable antidiabetic regimen for at least 3 months. NovoLog® Mix 70/30 was initiated once daily during phase 1 and titrated in phases to dosing schedules of BID (phase 2) and TID (phase 3) as needed to reach treatment goals. Subjects achieving an A1C level of ≤6.5% were considered to have completed the study. Patients not achieving A1C ≤6.5% continued to phases 2 and 3.³

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The significance, with respect to the long-term clinical sequelae of diabetes, of the differences in postprandial hyperglycemia between treatment groups has not been established.

Indications and Usage: NovoLog Mix 70/30 is indicated for the treatment of patients with diabetes mellitus for the control of hyperglycemia.

Please see brief summary of Prescribing Information on next page.

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