

Underutilization of Statin Therapy Among Patients with NAFLD in the USA: Validation with Big Data

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To The Editor,

We read with interest the article by Blais et al. [1] recently published in the Journal. In an analysis of a random sample of 255 patients with Nonalcoholic Fatty Liver Disease (NAFLD) in the Veteran Affairs (VA) hospital system with dyslipidemia, only 152 (59.6 %) were on statin therapy. We sought to validate these findings in larger, non-VA hospital systems in the USA. Additionally, because women are greatly underrepresented in the VA cohort (5 %), we sought to identify gender differences in statin use.

We used Explorys (Cleveland, OH), a private clinical registry based on billing codes, electronic medical records, and laboratory results from 26 major healthcare organizations and 360,000 providers covering about 50 million unique lives in the USA [2]. Using International Classification of Diseases version 9 code 571.8, we identified patients with NAFLD (age 18–65 years) and low-density lipoprotein (LDL) levels of ≥ 190 mg/dL (class I indication for statin therapy in the adult treatment panel guidelines [3]). We excluded patients with AST or ALT \geq three times upper limit of normal.

We identified 9960 patients with NAFLD and LDL ≥ 190 mg/dL (59 % female, 82 % Caucasians). Diabetes was diagnosed in 44 % of the patients, and 73 % had hypertension. Overall, 7030 (71 %) of the patients had a statin prescription. There was no difference in statin

prescription between males and females ($p = 0.86$). However, African Americans had a higher rate of statin prescription than Caucasians (76 vs. 70 %, $p < 0.001$).

In summary, our findings of a large non-VA “real-world” cohort of NAFLD with significant LDL elevation showed underutilization of statin in this high-risk population. There seems to be a small racial disparity, but no gender differences were observed in statin utilization. Quality improvement projects should focus on optimization of statin utilization in this patient population.

Compliance with ethical standards

Conflict of interest None.

References

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