

# Misdiagnosis of T2DM reported in patient with hb wayne

August 26 2015

---



(HealthDay)—Type 2 diabetes can be misdiagnosed in patients with hemoglobin (Hb) Wayne, according to a case report published online Aug. 20 in *Diabetes Care*.

Elona Turley, M.D., from the University of Alberta in Edmonton, Canada, and colleagues describe the case of a 66-year-old Caucasian female who was referred for specialist follow-up of treatment-refractory [type 2 diabetes](#), which was diagnosed based on two consecutive HbA1c results >6.5 percent. The patient had [glycemic control](#) that was difficult to manage, with persistently elevated HbA1c despite treatment with metformin and [insulin glargine](#); she began to experience symptoms of episodic hypoglycemia with treatment.

The researchers note that suspicion of interference was triggered by a fasting glucose of 84.6 mg/dL obtained at the same time as an HbA1c of 11.2 percent. The HbA1c analysis was repeated by immunoassay rather than high-performance liquid chromatography (HPLC; VARIANT II TURBO HbA1c Kit - 2.0; BioRad) and a result of 5.2 percent was obtained. The presence of the  $\alpha$ -globin chain mutant Hb Wayne was identified on hemoglobinopathy investigation. Hb Wayne has been reported to interfere with Bio-Rad VARIANT II HPLC HbA1c measurements. Measurement of HbA1c with immunoassay is more accurate as it uses antibodies to recognize the structure of the  $\beta$ -N-terminal glycosylated amino acid.

"Like all laboratory tests, HbA1c measurement is subject to interferences, and results must be interpreted within the clinical context," the authors write.

**More information:** [Full Text](#)

Copyright © 2015 [HealthDay](#). All rights reserved.

Citation: Misdiagnosis of T2DM reported in patient with hb wayne (2015, August 26) retrieved 26 April 2024 from

<https://medicalxpress.com/news/2015-08-misdiagnosis-t2dm-patient-hb-wayne.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--