

Artificial intelligence predicts gestational diabetes in Chinese women

22 December 2020



Credit: CC0 Public Domain

Machine learning, a form of artificial intelligence, can predict which women are at high risk of developing gestational diabetes and lead to earlier intervention, according to a new study published in the Endocrine Society's Journal of Clinical Endocrinology & Metabolism.

Gestational diabetes is a common complication during pregnancy that affects up to 15 percent of pregnant women. High blood sugar in the mother can be dangerous for the baby and lead to complications like stillbirth and premature delivery. Most women are diagnosed with gestational diabetes during the second trimester, but some women are at high risk and could benefit from earlier intervention.

"Our study leveraged artificial intelligence to predict gestational diabetes in the first trimester using electronic health record data from a Chinese hospital," said study author He-Feng Huang Ph.D. of the Shanghai Jiao Tong University School of Medicine and the International Peace Maternity and Child Health Hospital in Shanghai, China. "These findings can help clinicians identify women

at high risk of diabetes in early pregnancy and start interventions such as diet changes sooner. The artificial intelligence technology will continue to improve over time and help us better understand the risk factors for gestational diabetes."

The researchers analyzed nearly 17,000 electronic health records from a hospital in China in 2017 with machine learning models to predict women at high risk for gestational diabetes. They compared their predictions with 2018 electronic health record data and found they were successful at identifying who would develop gestational diabetes. The prediction models also found an association between low body mass and gestational diabetes.

Provided by The Endocrine Society



APA citation: Artificial intelligence predicts gestational diabetes in Chinese women (2020, December 22) retrieved 5 February 2021 from https://medicalxpress.com/news/2020-12-artificial-intelligence-gestational-diabetes-chinese.html

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.