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## Metformin er side effects constipation

fluxoxfoto/E+ /Getty Images Most women with polycystic ovary syndrome (PCOS) have insulin resistance or high insulin levels. Too much insulin generates inflammation, which in turn can lead to the development of type 2 diabetes, obesity, dyslipidemia, and nonalcoholic fatty liver disease. Insulin resistance is also one of the underlying causes of PCOS. Given the important role that insulin resistance plays in the pathophysiology of PCOS, common treatments involve insulin and diabetic metformin, which improves insulin sensitivity. Although metformin is not FDA approved for the treatment of PCOS, many doctors prescribe it to address some of the most common symptoms of the condition. May 28, 2020: The Food and Drug Administration (FDA) has requested that manufacturers of certain metformin formulations voluntarily withdraw the product from the market after the agency identified unacceptable levels of N-Nitrosodimethylamine (NDMA). Patients should continue taking their metformin as prescribed until their healthcare professional is able to prescribe an alternative treatment, if applicable. Stopping metformin without substitution can pose serious health risks for patients with type 2 diabetes. Metformin is one of the oldest and most studied drugs available in the United States. Although generally used to treat type 2 diabetes, metformin can also help relieve insulin resistance in women with PCS. It works by improving insulin sensitivity which in turn decreases insulin resistance and glucose production in your body. Metformin has been studied in girls up to 8 years of age, with some researchers recommending it to prevent the onset of PCOS. The drug can be administered safely at a dosage ranging from 500 mg to 2550 mg a day. Metformin reduces glucose and insulin levels in the blood in three ways: This suppresses glucose production from the liver. It increases the sensitivity of your liver, muscle, fat and cells to the insulin that your body makes. Decreases the absorption of carbohydrates you consume. In addition to controlling blood glucose levels, metformin may provide other health benefits for women with PCS. Although primarily used to treat type 2 diabetes, metformin can help reduce LDL cholesterol and fat levels in the blood and reduce the risk of cardiovascular disease. Metformin may also be used to treat complications of infertility and pregnancy associated with PCS. Women with PCS often have low ovulation rates and irregular menstrual cycles, making conception difficult. Metformin can stimulate ovulation and regulate menstruation, increasing your chances of becoming pregnant. It can also treat diabetes that develops during pregnancy (gestational diabetes) and delay or prevent complete diabetes from developing in overweight women. Overall, the of people can tolerate metformin very well. Although metformin can cause side effects in some people, people, are mild and are associated with taking the medicine for the first time. Nausea and gastrointestinal issues such as stomach pain, gas, bloating and diarrhea are some of the most common side effects. Some people also find that the extended release version of metformin is smoother in the digestive system and better tolerated. Drinking alcohol while with metformin is not recommended. Metformin should be taken with food to minimize side effects, however, you should avoid eating sugary and processed foods as they can worsen the digestive side effects of the medication. Long-term use and high doses of metformin increase the likelihood of vitamin B12 deficiency. Lack of vitamin B12 can cause mood swings, memory loss, and can cause permanent damage to the brain and nervous system. The ideal ranges of vitamin B12 should be >450 pg/mL. Elevated levels of semic homocysteine and urinary methylmalonic acid (MMA), the gold standard in the evaluation of B12, also indicate a b12 deficiency. The most serious side effect of metformin is lactic acidosis, a condition caused by the accumulation of lactic acid in the blood. This can occur if too much metformin accumulates in the blood due to chronic or acute renal problems. There is no natural substitute for metformin. But for those individuals who cannot tolerate or do not want to take prescribed medications, there are other ways to improve insulin sensitivity if you have PCOS without the side effects. Cysteine-n-acetyl is an antioxidant that has been shown in a randomized controlled trial to function as well as metformin to reduce insulin and cholesterol in women with PCS. Myo-inositol has been found to restore ovulation resulting in more pregnancies than metformin. Myo-inositol has also been shown to improve insulin and other metabolic aspects of PCS. Thanks for your feedback! What are your concerns? Verywell Health uses only high-quality sources, including peer-reviewed studies, to support the facts in our articles. Read our editorial process to learn more about how we verify the facts and keep our content accurate, reliable, and reliable. Goodman NF, Cobin RH, Futterweit W, Glueck JS, Legro RS, Carmina E. American Association of Clinical Endocrinologists, AMERICAN COLLEGE OF ENDOCRINOLOGY, ANDROGEN Excess and androgen and PCOS DISEASE STATE CLINICAL REVIEW: GUIDE TO BEST PRACTICES IN THE EVALUATION AND TREATMENT OF POLYCYSTIC OVARY SYNDROME - PART 2. *Pract Endocr.* 2015;21(12):1415-1426. doi:10.4158/EP15748. DSCPT2 Vitek W, Alur S, Hoeger KM. Off-label drug use in the treatment of polycystic ovary syndrome. *Fertile Sterile.* 2015;103(3):605-611. doi:10.1016/j.fertnstert.2015.01.019 Salber GJ, Wang YB, Lynch JT, et al. 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