Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) & Pregnancy

What is the prevalence of MASLD in pregnancy?

Metabolic dysfunction-associated steatotic liver disease (MASLD), previously called nonalcoholic fatty liver disease (NAFLD), affects approximately 18% of pregnant women in Western and Asian countries. It is the most common liver disease in women of childbearing age, with the prevalence tripling over the past 30 years.

What are the risk factors for developing MASLD during pregnancy?

Risk factors for MASLD during pregnancy include obesity, pre-existing diabetes or prior gestational diabetes, dyslipidemia, advanced maternal age, multiparity, and excessive weight gain during pregnancy. Genetic predisposition and certain ethnicities, such as Hispanic women, may also be at higher baseline risk.

How does pregnancy affect MASLD?

Pregnancy can exacerbate existing MASLD due to hormonal changes, particularly increased estrogen levels. The natural relative increase in insulin resistance experienced during pregnancy can also contribute to progression of MASLD.

What are the effects of MASLD on pregnancy?

MASLD during pregnancy may increase the risk of gestational diabetes mellitus, hypertensive complications (i.e., pre-eclampsia, eclampsia, and HELLP syndrome), cesarean delivery, postpartum hemorrhage, preterm birth, and low birthweight. These risks appear to be independent of BMI and imply that MASLD itself has additional risks beyond those associated with obesity alone.

How is MASLD diagnosed during pregnancy?

Diagnosis involves liver enzyme tests and additional testing to rule out other causes of liver injury. Imaging of the liver is typically performed by ultrasonography with or without non-invasive fibrosis assessment by transient elastography. Invasive liver sampling is avoided over concerns for safety of the pregnancy.

How is MASLD managed during pregnancy?

Currently no medications for MASLD are approved for use during pregnancy. Instead, management focuses on lifestyle interventions, including a healthy diet and physical activities permitted during pregnancy. Close monitoring for obstetric complications is essential, and insulin may be used if gestational diabetes develops, or pre-existing diabetes is known.

Can MASLD be prevented in pregnancy?

Prevention strategies include preconception counseling, weight loss, exercise, and diet modifications before pregnancy. Controlling antepartum elevated blood sugars, preventing gestational diabetes, and avoiding excess weight gain during pregnancy are also important.

Are there postpartum considerations?

Breastfeeding may reduce the risks of MASLD in mothers and has been associated with a lower incidence of obesity and MASLD in their breastfed children.

To learn more about MASLD, scan the QR code or to view all of our free online resources visit liverfoundation.org/resource-center.

For questions about liver wellness and disease, or for emotional support to patients at the point of crisis and information on local resources including physician referrals, please contact our Helpline at 1-800-465-4837.

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