

Intrahepatic Cholestasis of Pregnancy:

After Pregnancy Guide

Intrahepatic Cholestasis of Pregnancy (ICP) is a pregnancy-specific liver disorder where bile flow through the liver is disrupted. This can lead to complications in the pregnancy including preterm labor, stillbirth and the need for early delivery.

While ICP itself resolves at the end of pregnancy, some patients with ICP may have an increased risk of other liver conditions later in life.

While this guide is based on current guidelines, this is for informational purposes only and you should refer to your doctor for your personalized care.

With Delivery

Medication:	You can stop taking your ursodeoxycholic acid (Ursodiol) and any of your medications for itching
Itching:	Itching should resolve within a week of delivery
Blood Testing:	You should have liver function tests and bile acids measured at your 6 week postpartum follow-up (your OB can check these!)

Reasons for Referral to a Liver Specialist (Hepatologist):	
☐	Continued Itching after Pregnancy
☐	Elevated liver function testing or bile acid testing after pregnancy

☐	Severe ICP in pregnancy (bile acids over 40)
☐	Early ICP in pregnancy (diagnosed before 28 weeks)

Risks after Pregnancy

Recurrent ICP	Other Liver Disorders	Reaction to Birth Control
ICP can occur again in 44-80% of patients	ICP can be the first sign of an underlying liver disorder	Some ICP patients will itch while on hormonal birth control
Higher chance with early or severe ICP	ICP does not damage the liver but rather brings attention that something may be affecting the liver	Occurs with both estrogen and progesterone options, including the progesterone IUD
More common also with multiple pregnancies (twin/triplets) or In-Vitro Fertilization (IVF)	Includes: Primary Biliary Cholangitis (PBC), Progressive Familial Intrahepatic Cholestasis (PFIC), Hepatitis C, Alpha-1 Antitrypsin Deficiency (MZ most common)	If itching recurs on birth control, call your doctor for liver testing You may need to stop the use of this medication

Genetic Testing

Over 25% of cases of ICP have a genetic cause

Two main genes identified are the ABCB4 and ABCB11 genes. The SERPINA1 gene may also play a role. These genes often affect bile acid transport outside of pregnancy.

Genetic testing can help you know your risk for recurrence of ICP as well as the possibility of liver issues later in life

Genetic testing should **only be performed after discussion with your OB or provider** about the benefits and risks.

One option for genetic testing is available at no cost through a program through Mirum Pharmaceuticals and information can be found at <https://mirumpharma.com/patients-advocacy/resources/>

Underlying Liver Disorders linked to ICP

ICP is not thought to cause liver damage. Rather, the ICP may be the first signal that there may be an underlying liver disorder.

Disorder	Symptoms	Diagnostic Test
Progressive Familial Intrahepatic Cholestasis (PFIC)	-Itching -Most ICP patients have a "heterozygote" form (one gene altered) as "homozygotes" with two abnormal genes are usually diagnosed in childhood	Genetic Testing (ABCB4 and ABCB11 genes are most commonly affected)

	-BRIC is another form where you have episodes of itching throughout life	
Alpha-1 Antitrypsin Deficiency	<p>-Can affect the lungs as well, presents with asthma or other breathing difficulties</p> <p>-Liver involvement can be subtle and hard to pick up</p> <p>-Many ICP patients are heterozygotes, also known as "MZ"</p>	<p>Alpha-1 Genotype or Genetic Testing</p> <p>OR</p> <p>Alpha-1 Antitrypsin Level</p>
Primary Biliary Cholangitis (PBC)	<p>-Symptoms including itching and fatigue, sometimes abdominal pain</p> <p>-Alkaline phosphatase is usually elevated</p> <p>-Usually diagnosed in 40s or near menopause</p>	<p>Liver function testing including alkaline phosphatase (CMP)</p> <p>Anti-mitochondrial antibody (AMA)</p>
Viral Hepatitis	<p>-Patients with Hepatitis, especially Hepatitis C have a higher risk of ICP</p> <p>-With new medications, Hepatitis C is curable</p>	-Blood test screening panel

For more information visit:
Hopefromjohnellis.org

This guide is based on medical literature but is for educational purposes, please consult your physician for all of your medical management.

