

Early Onset Intra-Hepatic Cholestasis of Pregnancy

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What is Intra-Hepatic Cholestasis?

- Intra-Hepatic Cholestasis (ICP), previously known as Obstetric Cholestasis (OC) is a condition that affects the liver during pregnancy.
- It causes a build-up of bile acids in the body.
- Bile acids are made in the liver and help to digest fat and fat-soluble vitamins¹.

Symptoms of ICP:

- The main symptom is itching.
- Can range from quite mild to very severe.
- Often on the palms of the hands or the soles of the feet.
- **It does not cause a rash.**
- It might look red if the person has scratched a lot.
- **In rare cases you can develop jaundice².**

Diagnosis

- **Bile acid level is 19µmol/L or more**
- **Itching of the skin**
- **Otherwise well**



ICP is characterized by bile acid accumulation and pruritus, affecting 0.7% of pregnancies in the UK, mostly in the third trimester⁴

RCOG published new ICP Greentop Guideline – 2022

Rare Causes of ICP

Genetic	BRIC, PFIC3 (MDR3 deficiency)	May only manifest in pregnancy
Drug-induced	Antiepileptics, antibiotics, herbal supplements	In predisposed women
Infectious	Hepatitis C	Increases susceptibility
Autoimmune	PBC, PSC	May mimic ICP
Infiltrative/structural	Sarcoidosis, lymphoma	Extremely rare
Hormonal	Estrogen/progesterone receptor variants	May cause severe early ICP

Case Report:

27 year old female

Para 2 (2 x previous premature vaginal births at ~ 32/40)

Had ICP in both previous pregnancies

Post-natal liver function tests (LFTs) always returned to within normal limits

3rd pregnancy - Severe pruritus at 13 weeks’ gestation with BAs >100 µmol/L.

Referred to hepatology and maternal medicine teams for MDT management.

Investigated with Liver Screen and USS – Normal Results.

Treated with Cholestyramine, Ursodeoxycholic Acid (UCDA), and Rifampicin.

No improvement of LFT’s or symptoms.

At 23/40 - developed clinical jaundice, with LFTs showing elevated bilirubin and BAs >180 µmol/L.

At 31 weeks’ gestation, she presented in preterm labour and delivered prematurely.

Conclusion:

- Severe, early-onset ICP, is a rare condition with significant risks to mother and baby.
- Early recognition, multidisciplinary care, and vigilant monitoring are critical.
- Persistent symptoms may necessitate preterm delivery to mitigate risks.
- Postnatal follow-up is essential to rule out underlying or genetic conditions.
- Further research is needed to improve the understanding and management of early-onset ICP.

References:

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2. British Liver Trust (no date) *Intrahepatic cholestasis of pregnancy*. Available at: <https://britishlivertrust.org.uk/information-and-support/liver-conditions/intrahepatic-cholestasis-pregnancy/> (Accessed: 24 May 2025).
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