Intrahepatic Choleostatis of Pregnancy (ICP)

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

This guideline is developed from and should be used alongside: Intrahepatic cholestasis of pregnancy (Green-top Guideline No. 43) | RCOG

This guideline is for use by the following staff groups:

All staff caring for pregnant people with ?ICP.

Lead Clinician(s)

Approved by *Maternity Governance Meeting* on: 22nd May 2026

Approved by Medicines Safety Committee on: October 2021

Review Date: 22nd May 2029
This is the most current document and should be used until a revised version is in place

Key amendments to this guideline

Date	Amendment	Approved by:
October 2021	Changes of the guideline have been made with regards to the timing of IOL for women with OC. The dosing of Urso has also been changed to 500mg BD in line with the TOG article (current RCOG guideline being updated). Recognition of 'off-label' prescribing of treatments for this indication (however recognised as standard treatment by RCOG)	**Maternity Governance/ MSC**
March 2026	Important updates: Intrahepatic Cholestasis of Pregnancy is the terminology. Timing of delivery for BA of 19-39 by 40 weeks, 40-99 is 38-39 weeks, 100 or more consider 35-36 weeks. ICP in twins pregnancy increases the risk of stillbirth.Urso does not improve the perinatal outcome but limited evidence to only manage the itching. Evidence of reducing risk of preterm birth if BA levels higher than 40.Terminology in Appendix 2 Bile acids of 19 or more to diagnose ICP	**Maternity Governance/ MSC**

Inclusion statement

We recognise that although our policy uses words such as women/woman, not all birthing people or post-natal parents will identify as such. We encourage all staff to be welcoming of the diversity of our local population, be respectful of preferred language, pronouns, and adapt their communication appropriately. All staff should accommodate mothers and parents with individual needs or disabilities, whether they be physical or not visible, and adapt their care to support them with their pregnancy.

Ockenden Maternity Guidelines Assessment

Is there National Guidance Available for this guideline?	Yes
National Guidance used to inform guideline *e.g. NICE/RCOG*	Intrahepatic cholestasis of pregnancy (Green-top Guideline No. 43) | RCOG
Does the guideline follow National Guidance if available? *If no, what rationale has been used.*	Yes
If no national guidance available or national guidance not followed, what evidence has been used to inform guideline.	N/A
Ratified at Maternity Guidelines Forum:	**22/05/2026**

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Background

Intrahepatic Cholestasis of pregnancy (ICP) usually presents in the third trimester. It affects 0.7% of pregnancies (1.2-1.55 in women of Asian origin) and it is most common in Northern Europe and South America.

It is also more common in older women, women with multiple pregnancy, following IVF treatment and in those with a history of gallstones, hepatitis C infection or with a sister affected by the condition.

ICP is a multifactorial condition of pregnancy characterised by intense pruritus in the absence of a skin rash. It is associated with elevated maternal serum bile acid concentrations with or without deranged liver function tests. Neither of these have an alternative cause and both remit following delivery. Pruritus involving the palms and soles of the feet is particularly suggestive.

The clinical importance of Intrahepatic cholestasis of Pregnancy lies in the potential fetal risks. These may include spontaneous prematurity, iatrogenic prematurity, fetal distress, passage of meconium and intrauterine death.

In women with bile acid levels reaching 19-39micromol/L(Mild ICP), the risk of having a stillbirth is similar to the background population until 40 weeks gestation if no associated risk factors, (e.g. Diabetes and PET).

In women with bile acid levels reaching 40-99micromol/L(Moderate ICP), the risk of having a stillbirth is similar to background population until 38-39 weeks if no associated risk factors, (e.g. Diabetes and PET).

In women with bile acid levels reaching 100micromol/: or more (Severe ICP), the risk of having a stillbirth is higher than the background population. And planned birth between 35-36 weeks should be considered.

In women who are diagnosed with ICP and are twin pregnancy, the risk of having stillbirth is higher than the background population.

There can also be significant maternal morbidity in association with the intense pruritus and consequent sleep deprivation.

Women who have had previous Intrahepatic Cholestasis of pregnancy are at a high risk of developing same condition in a subsequent pregnancy (45-90%).

The patients covered by this guideline are women presenting with itching primarily on the hands and feet (although it may be generalised) with no rash after 24+0 completed weeks gestation.

It is rare for cholestasis to present under 24/40 (80% present after 30 weeks). However, there are case reports of onset in the first trimester, and of earlier onset in women with multifetal pregnancy. If the symptoms are classical then consideration should be given to the diagnosis and investigations performed as appropriate with discussion with a hepatologist.

NB: Women who have had previous cholestasis of pregnancy do not require routine bloods.
Only investigate if symptoms occur.

Diagnosis and Treatment

See Appendix 1

Antenatal Fetal Monitoring

Poor outcome cannot be predicted by biochemical results and delivery decisions should not be based on results alone.

None of the fetal monitoring modalities (CTG/USS/Doppler) are reliable in predicting or preventing fetal death in Intrahepatic Cholestasis of Pregnancy. Placental insufficiency, IUGR or oligohydramnios are not features of the disease and umbilical artery Doppler assessment of uterine, umbilical or fetal cerebral arteries are not different when compared with other pregnancies.

If fetal movements and fetal growth according to customised growth chart are satisfactory, additional fetal monitoring by CTG/ USS/ Doppler is not recommended in obstetric cholestasis.

Continous fetal heart rate monitoring is recommended in labour.

Timing of delivery

In women with peak bile acids of 40 to 99 micromol/L, the reported stillbirth rate is 0.28%, which does not exceed the background population risk, although risk appears to rise around 38 to 39 weeks of gestation; despite small sample sizes and wide confidence intervals, offering planned birth at 38 to 39 weeks is reasonable, with consideration of earlier delivery if additional conditions such as gestational diabetes or pre-eclampsia are present.

When peak bile acids reach 100 micromol/L or more, the stillbirth rate increases to 3.44%, exceeding the background rate, and the risk seems to rise from 35 to 36 weeks of gestation; this information should be discussed with the woman, and timing of planned birth should reflect clinical factors and her preferences, consistent with findings from large retrospective cohort data and decision modelling studies that support delivery around 36 weeks.

In women with intrahepatic cholestasis of pregnancy and bile acids of 40 micromol/L or more, coexisting medical conditions may further increase stillbirth risk, and these factors should be included in decisions about the timing of planned birth.

Therefore, Timing of Delivery is as follows:

Recommendation	Evidence quality	Strength	Rationale for the recommendation
Consider options of planned birth by 40 weeks' gestation or ongoing antenatal care according to national guidance in women with mild ICP (peak bile acids 19–39 micromol/L) and no other risk factors; advise women that the risk of stillbirth is similar to the background risk	1+	A	Systematic review with individual patient data meta-analysis reporting risk of stillbirth, stratified by peak maternal bile acid concentration

Recommendation	Evidence quality	Strength	Rationale for the recommendation
Consider planned birth at 38–39 weeks' gestation in women with moderate ICP with peak bile acids 40–99 micromol/L and no other risk factors; advise them that the overall risk of stillbirth is similar to the background risk until 38–39 weeks' gestation	1+	A	Systematic review with individual patient data meta-analysis reporting risk of stillbirth, stratified by peak maternal bile acid concentration
Consider planned birth at 35–36 weeks' gestation in women with severe ICP with peak bile acids 100 micromol/L or more; advise them that the risk of stillbirth is higher than the background risk	1+	A	Systematic review with individual patient data meta-analysis reporting risk of stillbirth, stratified by peak maternal bile acid concentration
Advise women that the presence of co-morbidities (such as gestational diabetes, pre-eclampsia, multifetal pregnancy) appear to increase the risk of stillbirth and may influence decision-making around timing of planned birth	2+	C	Evidence from national surveillance case control study supported by other case series demonstrating increased stillbirth risk with comorbidities

Two suggested models of fetal demise in intrahepatic cholestasis of pregnancy are consistent with evidence indicating that high bile acids contribute to the causes of adverse outcomes: increased bile acids are associated with fetal cardiac arrhythmia and placental vessel spasm. For women with bile acids more than or equal to 40 micromoles per litre, at any time during pregnancy, adverse outcomes showed a linear relationship with serum bile acid levels

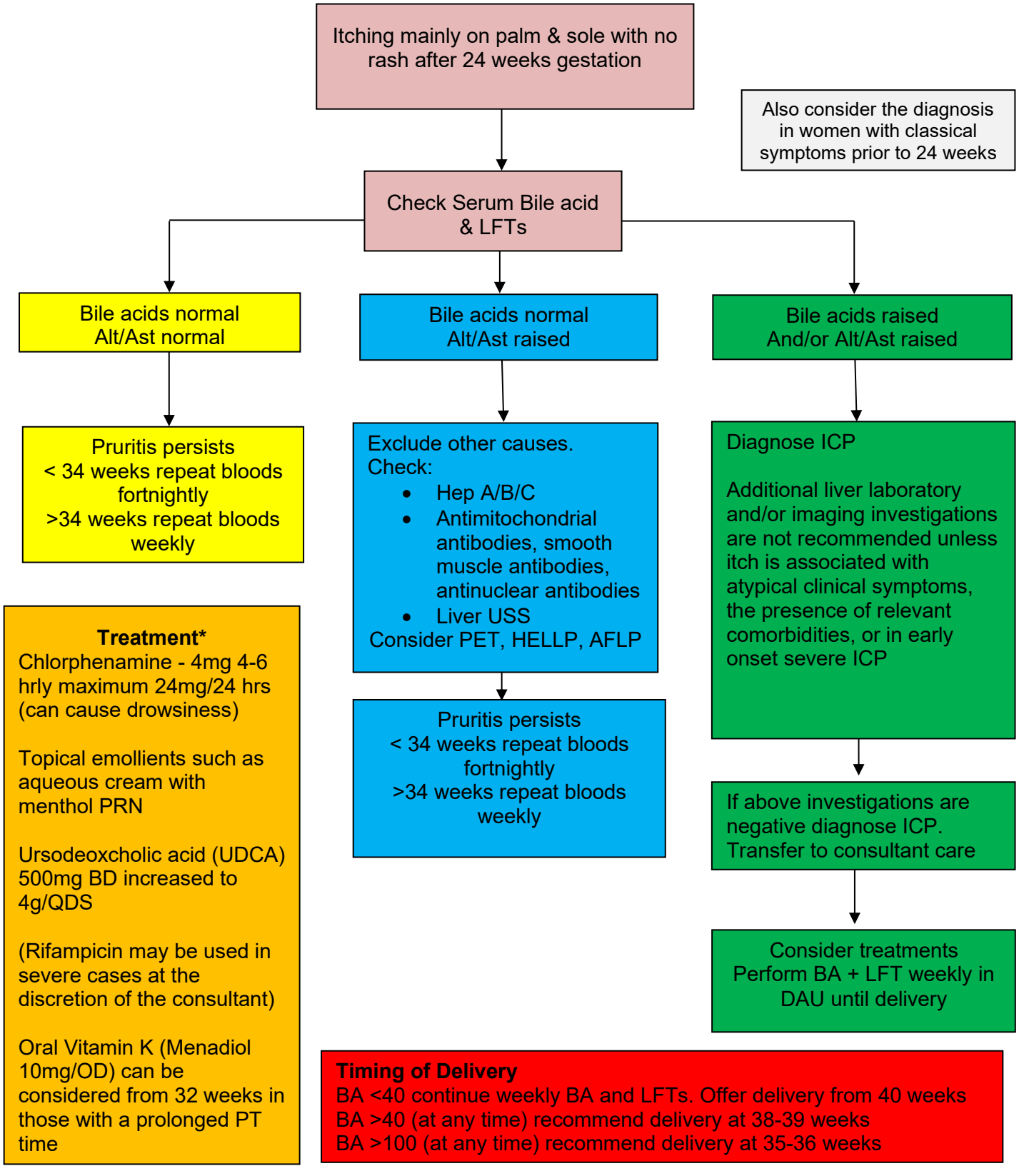
Postnatal

LFT may take 10 days to return to normal post delivery and therefore should not be checked prior to this. Confirmation of the diagnosis relies on the postnatal resolution of symptoms and abnormal biochemistry. Postnatal review should therefore include checking LFT's and bile acids at 4-6 weeks post partum.

Women should be informed of the high recurrence rate in subsequent pregnancies (45-90%).

Women with a history of cholestasis should be advised to avoid the use of oestrogen containing contraception.

Appendix 1. Investigation and Management of Cholestasis in Pregnancy



Appendix 2 : Important Terminology

TABLE 1 Terminology for pregnant women with itching of normal skin

Diagnosis	Clinical features
Gestational pruritus	Itching and peak bile acid concentrations <19 micromol/L[a]
Mild ICP	Itching and raised peak bile acid concentrations 19–39 micromol/L
Moderate ICP	Itching and raised peak bile acid concentrations 40–99 micromol/L
Severe ICP	Itching and raised peak bile acid concentrations ≥100 micromol/L

*In women with intrahepatic cholestasis of pregnancy and serum bile acid concentrations > 40mmol/L, ursodeoxycholic acid should be offered as a treatment to reduce the risk of spontaneous preterm birth and it may also be protective against stillbirth

*while these treatments are not specifically licensed for the treatment of Intrahepatic Cholestasis of pregnancy, they are recognised as standard treatments by RCOG

Appendix 3: DAU Checklist

Worcestershire NHS
Acute Hospitals NHS Trust

Maternity Day Assessment Unit
Obstetric Cholestasis Surveillance

Patient details sticker

Bile Acids 19 (non-fasting) and above ± alt > 40

Blood for	Treatment Used	Treatment Used
▪ Hepatitis A☐ B☐ C☐ ▪ EBV/CMV ☐ ▪ Liver smooth muscle Antimitochondrial /Ab S	Aqueous cream with menthol ☐ Chlorphenamine 4 mgs ☐	Ursodeoxycholic acid (UDCA) (starting dose 500mg BD) ☐ Oral Vit K 10 mg/day (menadiol) from 32 wks ☐ If prothrombin time prolonged
▪ Liver U/S scan		

Liver Profiles							
Date							Non-pregnant values
T Protein							60-85 g/l
Albumin							35-55 g/l
Globulin							18-36 g/l
Bilirubin							2-17 umol/l
Alk. Phos							30-130 IU/l
GGT							0-30 U/l
ALT							>30 U/l
Bile acids							0-14 umol/l
Platelets							
Coagulation studies							
Prothrombin time							

Women who have had confirmed raised bile acids should have their LFT's checked at 6 weeks by GP and referral to physician if they remain raised.

Women should be advised to avoid oestrogen containing contraception.
Woman informed ϒ

References

Indicated Late-Preterm and Early-Term Deliveries. The American College of Obstetricians and Gynaecologists. ACOG Committee opinion Number 818.. Vol 137, No 2. Feb 2021.

Management of intrahepatic cholestasis in pregnancy. The Lancet Vol 393, March 2019.

Intrahepatic Cholestasis of Pregnancy. Hepatology, Vol 73, No 1, 2021.

Intrahepatic cholestasis of pregnancy. Greenberg M, Torri D, Pettker C. Feb 2021. Society for Maternal-Fetal Medicine Consult Series #53. Feb 2021.

Intrahepatic cholestasis of pregnancy. Geenes V, Williamson C, Chappell L. The Obstetrician & Gynaecologist, 2016;18:273-81.

Intrahepatic cholestasis of pregnancy Green-top Guideline No. 43 June 2022

Monitoring

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	IOL timings based on Bile Acid Readings	Notes Audit	Annually	Obstetric Doctors	Audit Meeting	Annual

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Maternity Governance Meeting
Maternity Guidelines Committee

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Maternity Quality Governance Meeting