

## MATERNITY GUIDELINES

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### Cholestasis (OC) in pregnancy

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#### **1. Clinical features**

- Affects 0.1 - 0.7% pregnancies (1-7 per 1000, i.e. 5-30 patients per year at Derriford)
- Severe widespread pruritus in the second half of pregnancy. Typically worse at night. Pruritus that involves the palms and soles of the feet is particularly suggestive of OC.
- Associated with malaise and insomnia.
- NO RASH.
- Abnormal liver function tests (**NB** use pregnancy specific reference ranges not standard hospital ranges) and / or raised bile acids (normal range 1-6 $\mu$ mol/L).
- May have dark urine, anorexia, steatorrhoea.
- Recovery usual after delivery, occasionally progresses in puerperium.

## 2. Investigation and Diagnosis

- Careful history taking and examination of the skin should be carried out to exclude dermatological conditions.
- Diagnosis of OC is based on raised bile acids. Request bile acids and LFTs.
- Bile acids  $\geq 6$  is consistent with the diagnosis of obstetric cholestasis however fetal complications do not occur until bile acids  $\geq 40$ .
- Furthermore the risk of stillbirth does not increase until bile acids  $\geq 100$ .
- If liver transaminases are significantly raised then:
  - Exclude other causes of abnormal liver function (check viral screen for Hepatitis A, B and C, Epstein Barr, CMV)
  - Liver autoantibodies for chronic active hepatitis and primary biliary cirrhosis
  - Ultrasound scan of liver

## 3. Counselling

Women should be advised that:

- The incidence of premature birth, especially iatrogenic, is increased.
- There is increased likelihood of meconium passage in pregnancies affected by OC.
- There have been no reports of any harmful effects to babies from OC pregnancies once they have been delivered.
- In a hospital setting, the current additional risk of stillbirth above that of the general population has not been determined but is likely to be small.

## 4. Management

- All women should be booked under Consultant-led care.
- Liver function tests and prothrombin time should be performed weekly unless requested more frequently by Consultant Obstetrician or Chemical Pathologist.
- Women should be offered an appointment with their named consultant following diagnosis to decide on the frequency of blood tests and discuss possible induction of labour after 37+0. See section 6.
- Drug therapies include:

- Topical emollients (efficacy unknown)
- Antihistamines may provide sedation at night but is unlikely to help itching
- Ursodeoxycholic acid (UDCA) 8-12 mg / kg / day in two divided doses. This improves pruritis and liver function but does not improve outcomes.
- Dexamethasone RCOG do not recommend use outside of a clinical trial without a thorough consultation with the women

No specific antenatal fetal monitoring is recommended for patients with suspected OC. Ultrasound and cardiotocography are not reliable methods for preventing fetal death.

## **5. Maternal risks**

- There is little evidence for the use of maternal Vitamin K unless there is frank steatorrhoea or prolongation of prothrombin time. If indicated 10mg water soluble Vitamin K should be offered to the mother daily.
- The newborn should be recommended to have standard Vitamin K administration.

## **6. Management of Labour and Delivery**

- Stillbirths in OC have been reported across all gestations. As gestation advances, the risk of delivery (prematurity, respiratory distress, failed induction) versus the uncertain fetal risk of continuing the pregnancy (stillbirth) may justify offering women induction of labour after 37+0 weeks of pregnancy when bile acids are  $\geq 40$ .
- The decision should be made after careful counselling with the women and discussion with the Consultant.
- OC has been linked with an increased incidence of passage of meconium, premature delivery, fetal distress, delivery by caesarean section and postpartum haemorrhage.
- Women diagnosed with OC should give birth in a consultant led unit with continuous fetal monitoring.

## **7. Postnatal**

- Check LFT's and prothrombin time after a minimum of 10 days. This should be done at the GP surgery. If not resolved, repeat and discuss with Consultant Obstetrician about further management.
- Advise of high risk of recurrence in future pregnancies.
- Advise to avoid contraception containing oestrogen.

## **8. Record Keeping**

It is expected that every episode of care be recorded clearly, in chronological order and as contemporaneously as possible by all healthcare professionals as per Hospital Trust Policy. This is in keeping with standards set by professional colleges, i.e. NMC and RCOG.

All entries must have the date and time together with signature and printed name.

<p><b>Monitoring and Audit</b></p> <p><b>Auditable standards:</b> Perinatal outcome and gestational age at delivery. Documentation of advice for postnatal follow up of LFTs with GP.</p> <p><b>Reports to:</b> Clinical Effectiveness Committee – responsible for action plan and implementation of recommendations from audit</p> <p><b>Frequency of audit:</b> Annual</p> <p><b>Responsible person:</b> Obstetric Registrar/ Consultant</p>
<p><b>Cross references</b></p> <p><i>Guidelines can now be found on the network share (drive) 'G:\DocumentLibrary\UHPT Clinical Guidelines\Maternity'.</i></p> <p>Maternity Hand Held Notes, Hospital Records and Record Keeping</p>
<p><b>References</b></p> <p>C Ovardia et al. Association of adverse perinatal outcomes of intrahepatic cholestasis of pregnancy with biochemical markers: result of aggregate and individual patient data meta-analysis. Lancet 2019; <b>393</b>:899-909.</p> <p>RCOG Green top guideline No. 43 Obstetric Cholestasis. April 2011.</p>

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