A Retrospective Review of Management of Cases diagnosed as Intrahepatic Cholestasis of Pregnancy (IHCP): Experience at a busy New South Wales metropolitan hospital.

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Background

Obstetrics cholestasis / IHCP is diagnosed when otherwise unexplained pruritus particularly of hands and soles occurs in the 2nd or 3rd trimester of pregnancy with abnormal liver function tests (LFTs) and/or raised bile acids and both resolve after delivery.
IHCP causes pruritis in mothers and poses significant fetal risks of preterm delivery, meconium liquor and stillbirth warranting early induction of labour 36-37 when bile acids are >100µmol/l (1).

Aim

i. Determine compliance in diagnostic criteria to diagnose IHCP.
ii. The average gestational age at which IHCP were subjected to Induction of labour (IOL).
iii. Determine their feto-maternal outcomes.
iv. Appropriate discharge plan to see resolution and confirm IHCP retrospectively as it helps to predict a significant recurrence rate of 60-70% in the next pregnancy.

Method

A retrospective review of cases, labelled as IHCP over a 23-month period (Jan 2019-Nov 2020) were analysed based on electronic medical records documentation, antenatal clinic files and pathology results.

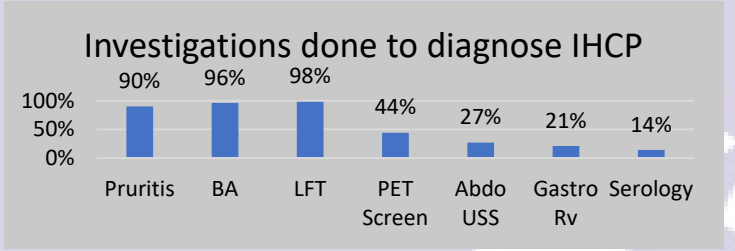
Results

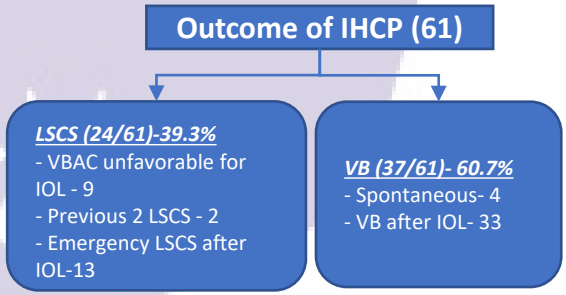
A small group of 61 pregnancies labelled IHCP analysed consisting 44.2% primi & 55.7% multigravidas.
i. Not all cases were evaluated to exclude other potential etiologies for cholestasis. The underlying biochemical derangements did not meet the diagnostic criteria in all cases, BA <10µmol/l also included. (Some pruritic women 8.1% were diagnosed and surveilled for IHCP due to history of IHCP in previous pregnancy, regardless of biochemistry in index pregnancy).
ii. IOL prioritised mainly for cholestasis in women with multiple risk factors (59% at 37-38 weeks)
iii. Significant Cesarean section rate 39.3% ,vaginal birth 60.6% (including 14% instrumental), SCN admission 24.5% with nil neonatal mortality rate.
iv. Discharge plan to ensure IHCP resolution advised only in 50.8% patients.

Literature Review

RCOG(2): - Other causes of liver dysfunction and itching should be excluded before IHCP diagnosis
- Discuss intervention >37wks stronger if severe biochemical abnormality and is associated increased maternal morbidity.

ACOG(1) - Delivery at 36 weeks if BA >100 µmol/L(Gr 1B) between 36 to 39 if BA between 40 and 100 µmol/l (Gr 1C)
- Reasonable for timing of IOL towards 39 weeks if BA <40 µmol/l





Cholestasis Outcome at various gestational ages

Variable	Total Cholestasis	GA < 37	GA 37-38	GA 38-39	GA 39 - 40
Total	61	10(5 spont)	36	9	6
VB	60.6%	60%	59.3%	77.8%	50%
CS	39.3%	40%	41.7%	22.2%	50%
PPH	27.8%	30%	27.7%	22.20%	33.30%
SCN	24.5%	70%	19.40%	11.10%	0%

Conclusion

- Delivery before 37 weeks should be avoided in absence of elevated total bile acid levels(3).
- Literature review suggests to individualize delivery timings based on biochemical severity and reasonable to consider IOL towards 39 weeks if BA <40 µmol/l given low risk of stillbirth(4).
- In this review, all IHCP were actively managed regardless of underlying biochemical severity. Aggressive management of all patients resulted in a good perinatal outcome, however, there is a significant increase in maternal morbidity. An exponential rise in cesarean section rate is a global concern to be emphasized to reduce the significant obstetric complications associated with previous cesarean section.
- We suggest the development of a local policy on IHCP, to guide staff in diagnosis and management of IHCP and have a more robust follow-up plan to ensure resolution as well as confirmation of the diagnosis retrospectively.

References:-

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3. UpToDate: Intrahepatic cholestasis of pregnancy. Authors: Keith D Lindor, MD, Richard H Lee, MD.
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