

Introduction:

Intrahepatic cholestasis of pregnancy (IHCP) is the most common liver disorder during pregnancy, characterized by pruritus (without rash), elevated bile acid/aminotransferase levels, and resolution after delivery.

Incidence ranges from 0.02% to 2.4%. Etiology involves impaired liver metabolism of placental sex steroids, genetic predispositions (e.g., MDR3, ABCB11 mutations), and triggers like synthetic progesterone, estrogen.

This study examines IHCP incidence, biochemical changes, and maternal/neonatal outcomes compared to normal pregnancies.

Methodology:

A case–control study was conducted from June–December 2024 at Ankura Hospital, Hyderabad, with 25 IHCP patients and 25 healthy pregnant controls. Ethical approval and informed consent were obtained.

Tests included hemogram, liver function (bilirubin, AST/ALT, bile acids), urinalysis, viral markers, and hepatobiliary ultrasonography to exclude other pathologies. IHCP diagnosis required pruritus with elevated liver enzymes (ALT > 40 IU/L, AST > 35 IU/L) or bile acids > 14 μ mol/L.

IHCP patients received oral ursodeoxycholic acid (10–15 mg/kg/day).

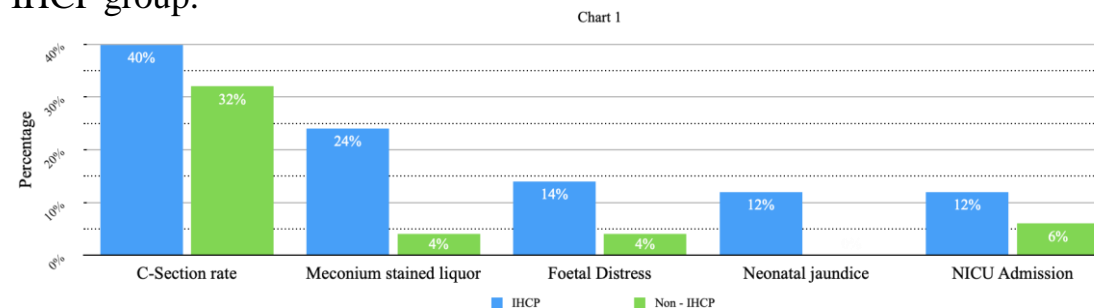
Weekly fetal biophysical profiling was done until delivery. Pregnancies were terminated at 37–38 weeks unless spontaneous labour occurred earlier. Outcomes of meconium-stained liquor, preterm delivery, mode of delivery, NICU admissions, maternal and neonatal complications were compared with the control group.

Results:

The study included 50 pregnant women (25 IHCP, 25 controls).. Symptoms, primarily pruritus, started at 31–33 weeks (mean POG: 31.48 weeks).

•**Pruritus:** 100% in IHCP vs. 4% in controls.

•**Biochemical findings:** Mean bilirubin levels were similar (0.49 vs. 0.48), but ALT,AST and ALP was significantly higher in IHCP group (117.5,104.6,218.4 vs. 41.9, 45.2, 72.7). In 88% of IHCP patients (22/25) bile acids levels were >14 μ mol/l. 20 (80%) of IHCP group were induced whereas 4 (16%) of control group required induction.15(60%) of IHCP group and 17 (68%) of controls had vaginal delivery and remaining 10 (40%) and 8 (32%) had caesarean delivery, respectively. 86% symptomatic cases relieved from symptoms with medication. Relief of symptoms following delivery was 100% in IHCP patients. Out of 50 patients in the study, 34 patients received progesterone supplementation, with 23 in IHCP group and 11 in non IHCP group.



Conclusion: In the present study, there is a significant incidence of meconium-stained liquor (MSL), neonatal jaundice, NICU admission in the IHCP group in comparison to non-IHCP group.