



Intrahepatic Cholestasis of Pregnancy: A three-year revised experience in Centro de Medicina Laboratorial Germano de Sousa

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Objective

Intrahepatic cholestasis of pregnancy (ICP) is a rare and multifactorial disease. It is characterized by generalized pruritus with changes in laboratory parameters of liver function. It usually occurs in the second half of pregnancy, averaging at 29.5 (\pm 7) weeks, resolving completely in the puerperium. From a maternal point of view, the situation may be considered benign, but fetal and neonatal complications are frequent and serious, with preterm birth, fetal distress, including respiratory distress syndrome (ARDS), and perinatal death. From the laboratorial point of view, ICP presents with elevation of serum total bile acid concentration, above 10 $\mu\text{mol/L}$, elevation of transaminases, alkaline phosphatase and GGT, showing a laboratory pattern of cholestasis. The authors performed a retrospective review of the cases of ICP of the last 3 years correlating them with the fetal and neonatal complications.

Methods

Retrospective review of results from January 2015 to January 2018, based on the identification of pregnant women with bile acid assays $> 10 \mu\text{mol/L}$, and elevations in biochemical liver function tests. Dosing of bile acids by enzymatic assay; transaminases and GGT, by enzymatic colorimetric assay at 37°, alkaline phosphatase by the p-Nitrophenylphosphate method, in the Dimension RXL, Siemens equipment.

Results

We had 520 patient requests with a mean age of 34.87 years. We found that 47% of the studied population had bile acid assays higher than 10 $\mu\text{mol/L}$, with 43.6% of pregnant women (227) with values between 10 and 50 $\mu\text{mol/L}$, 2.5% (13) with values between 50 and 100 $\mu\text{mol/L}$ and 0.96% (5) with bile acids higher than 100 $\mu\text{mol/L}$. Fetal and neonatal complications were investigated in 206 pregnancies.

Conclusion

There are no prevalence studies of the disease in Portugal. ICP is rare and although it is benign from the maternal point of view, it incurs on potential fetal and neonatal complications.