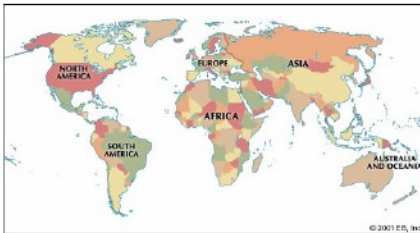




Focus on Intrahepatic Cholestasis of Pregnancy

Intrahepatic cholestasis of pregnancy (IHCP) is characterized by intense generalized pruritus during pregnancy without a primary skin lesion. The condition is caused by maternal liver dysfunction and may occur as early as the 10th week of pregnancy [8], but most often presents during late pregnancy. The pruritus is worse on the palms and the soles of the feet, and disappears within days following delivery. Approximately 10% of patients suffering from IHCP experience jaundice. [2] IHCP is associated with an increased risk of fetal death, prematurity, and postpartum hemorrhage [9].

The differential for pruritus without a primary skin lesion includes xerosis, almost any drug, numerous systemic diseases including cholestasis, uremia, iron deficiency, leukemia, polycythemia, lymphoma, thyroid disorders, diabetes, visceral malignancies, multiple sclerosis, [6] and HIV [7]



The prevalence of IHCP in pregnant women in Chile, Bolivia, Scandinavian, Mediterranean countries, Portugal, Poland, Australia, Canada, and China is approximately 1% to 4%. In the United States, Switzerland, and France the prevalence of reported IHCP is low (below 0.5% of pregnancies).” In high-prevalence regions, a family history of IHCP is present in up to 50% of the patients [3]. Other groups at risk are twin gestations [4] and women with hepatitis C infection [5].

The diagnosis of IHCP is made when there is pruritus in the absence of other pathology with an abnormality in gamma-glutamyl transpeptidase (GTT), alanine amino-transferase (ALT), aspartate amino-transferase (AST), or fasting serum total bile acids [1]. The fasting serum total bile acid concentration is the most specific test for the diagnosis of IHCP [2].

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Although adverse perinatal outcome is not consistently predicted by conventional fetal surveillance [10].active management comprised of semi-weekly non-stress test and AFI, with delivery at 37 weeks or earlier in the presence of non-reassuring fetal testing, meconium, or severe maternal symptoms unresponsive to therapy with mature fetal lungs has been shown to significantly reduce the incidence of fetal death [11]. In the absence of active management perinatal mortality is 2.5 to 11 % [9,10]

Pruritus may be treated with cholestyramine. However, it may worsen malabsorption of vitamin K and does not alter liver function or fetal prognosis [12]. Pruritus may also be treated with ursodeoxycholic acid (15 mg per kg per day). Ursodeoxycholic acid also appears to normalize liver function [13] and, in one small study, appeared to improve fetal outcome [14].

The risk of postpartum hemorrhage is increased because of poor vitamin K absorption [9,15]. Prothrombin time should, therefore, be checked periodically and treated as necessary with parenteral vitamin K [16].

Patients should be advised that cholestasis of pregnancy recurs in up to 70 percent of subsequent pregnancies [17].

Management

Initial studies:

- CBC with differential
- Chem 7
- Gamma-glutamyl transpeptidase (GGT)
- Alanine amino-transferase (ALT)
- Aspartate amino-transferase (AST)
- Total bile acids
- Alkaline phosphatase .

Other studies as clinically indicated : Hepatitis C , total bilirubin , TSH, fasting blood glucose, HIV, CXR, and skin biopsy.

Treatment

- Cholestyramine: 4 g PO 1-6 times qd (cartons of 60 pkts, 1pkt=4gm)
- Ursodeoxycholic acid (Actigall, Urso): 300 mg PO QID with food. (300 mg caps) may also be offered.
- Parenteral vitamin K (phytonadione; AquaMephyton) 5 to 10 mg/d IM QD in patients with an abnormal PT.

Surveillance

- Twice weekly antenatal testing (NST and AFI) commencing at diagnosis.
- Monitor prothrombin time especially if taking cholestyramine.

Delivery

- Amniocentesis prior to 36 weeks in severe cases.
- Deliver after 37 weeks or earlier in the presence of fetal lung maturity.
- Deliver by 38 weeks in all cases.

(continued on page 2)

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