Cholestasis of pregnancy may be subdivided into two syndromes, pruritus gravidarum and the idiopathic cholestatic jaundice of pregnancy, which represent varying degrees of severity of a common disorder. These syndromes were first differentiated from other causes of itching and jaundice during pregnancy by Svanborg, Thorling, Arfwedson and others (1-5). These syndromes tend to occur in the third trimester of pregnancy. Pruritus gravidarum and the idiopathic cholestatic jaundice of pregnancy tend to occur in the third trimester of pregnancy, although symptoms may appear as early as the first trimester, and are usually characterized by symptoms of generalized pruritus, mild anorexia, nausea and occasional vomiting. In the more severe form, jaundice then appears. The liver may become slightly enlarged and tender, and liver function tests reflect cholestasis, with elevated levels of serum alkaline phosphatase, $5'\text{-nucleotidase}$, conjugated bilirubin and bromsulphthalein retention, with minimal evidence of hepatocellular necrosis. The major pathological lesion, as seen in the liver biopsy, is intrahepatic cholestasis with centrilobular bile staining of liver cells and canalicular bile plugs, possibly accompanied by minimal parenchymal cell necrosis in areas of bile stasis, but without inflammatory cells or proliferation of mesenchymal cells (see Figure 1).

Complete remission of clinical biochemical and histologic abnormalities promptly follows delivery, but the syndromes tend to recur in subsequent pregnancies. It is of particular interest that the syndromes tend to recur when the patients receive oral contraceptive agents. Conversely, in approximately fifty percent of all reported cases of jaundice occurring during oral contraceptive usage, a history of cholestasis during pregnancy was elicited (6-8).
The following studies were carried out to determine what degree of subclinical cholestasis occurs during normal pregnancy when endogenous estrogen and progesterone levels are high, and whether estrogen may play an etiologic role in the syndromes of cholestasis of pregnancy and during oral contraceptive usage in sensitive individuals. Further studies were carried out in the rat to determine the effects of estrogen therapy on bile flow and estrogen metabolism.

LIVER FUNCTION DURING NORMAL PREGNANCY AND PUERPERIUM

Liver function tests performed during normal pregnancy frequently have been shown to deviate from those performed in the normal, non-pregnant state. These deviations have been reviewed in many of the monographs concerning jaundice during pregnancy (2,4,5). Most of the studies of liver function tests during pregnancy have been conducted either on a retrospective basis or by determining function at one point in time during pregnancy, thus using different patients to establish each set of values. It was considered of interest to follow prospectively a group of women throughout pregnancy, labor