

Symposium Liver & Pregnancy

# Liver cirrhosis and pregnancy

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The liver accomplishes multiple functions such as the biotransformation of insoluble compounds (drugs, toxins, bilirubin), the metabolism and excretion of lipids (cholesterol in particular) the production of several plasma proteins (good examples are albumin, coagulation factors, transferrin), and the metabolism of amino acids and carbohydrates. The liver also plays a crucial role in the metabolism of different hormones, estrogens and progesterone among the others. This explains why during a chronic liver disease (CLD) severe alteration on the hormonal status occurs. Cirrhosis is often associated with amenorrhea and consequently, women with CLD (cirrhosis obviously included) have difficulty conceiving. If pregnancy occurs, it is associated with an increased risk of complications. Approximately 15 to 20 percent of pregnant women with CLD suffer spontaneous abortion, increased risk for premature childbirth or stillbirth.<sup>1</sup>

If portal hypertension is present bleeding from esophageal varices is the biggest risk for women with cirrhosis. Variceal bleeding is most common during the second trimester, occurring in approximately 20 to 45 percent of women with portal hypertension. Variceal bleeding may also occur during labor. Death of the mother is similar to that occurring in the absence of pregnancy and accounts for about 20%.<sup>2</sup> It is recommendable that women with cir-

rhosis who are planning to become pregnant should undergo an upper endoscopy although this is usual during the follow-up program for CLD in liver centers.

In spite the number of complications, many women with cirrhosis successfully give birth to a healthy newborn without any complications. It is important for these patients to be checked at staggered intervals by a hepatologist who, together with the obstetrician may decide what to do and safely and effectively address any complication.

However what is really making the difference is the stage of liver disease. If cirrhosis is well compensated, the pregnancy is following usually a normal pattern and the pregnant woman does not have any additional alteration. In addition, although systematic studies are lacking, it is quite common to observe that the liver function trends to improve during the 2<sup>nd</sup> and 3<sup>rd</sup> trimester of pregnancy.

**Key words: Liver, cirrhosis, pregnancy.**

## References

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2. Garcia-Tsao G. Portal hypertension. *Curr Opin Gastroenterol* 2006; 22: 254-62.