



## Herpes simplex virus in pregnancy

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### Objective

Herpes simplex virus (HSV) is a rare cause of hepatitis in adults. It occurs in two distinct adult populations: pregnant women and immunocompromised adults. Although there are no specific clinical features, abnormal liver function tests (LFT) and the absence of jaundice in the third trimester of pregnancy should raise suspicion of HSV infection.

### Methods

A 24 years old Emirati, Primigravida, presented to the labour ward at 34+4 weeks with high grade fever and epigastric pain. There was no significant past medical or surgical history. Her antenatal follow up was unremarkable. Investigations showed markedly elevated liver enzymes, other investigations for preeclampsia turned out to be normal. A healthy baby was born with birth weight 2.5 kg by caesarean section after a course of steroids in view of increasing LFT. On third post-operative day, her condition deteriorated, she had high grade fever, abdominal pain, aggravation of the liver function, with normal random blood sugar. She was transferred to intensive care unit (ICU). Rubella, toxoplasmosis and malaria screening were normal. Blood, urine and sputum cultures were negative. Immunology result showed CMV IgG and IgM positive but PCR negative, HSV IgG and IgM positive. TB Quantiferon negative. Abdomen ultrasound demonstrated hepatomegaly suggestive of parenchymatous liver disease. CT abdomen showed picture of fulminant hepatitis. Liver biopsy has been declined by the patient. Treatment start with Acyclovir/Ganciclovir along with broad spectrum antibiotics and antifungal. With supportive care her LFT dramatically improved but she continued to spike temperature and drop in Hb, without symptoms of gastrointestinal bleeding. Low Hb has been corrected with blood transfusions. PET scan showed hepatosplenomegaly, hypermetabolic lymphadenopathy involving supraclavicular, mediastinal, porta hepatis/cealic axis and retroperitoneal lymphnodes. Patient opted to have treatment abroad. She travelled to Korea, underwent liver core biopsy which showed necrotizing granuloma and started an anti-Koch's treatment for 9 months. The Patient's condition improved.

### Results

Hepatitis can result from acute or latent infection with either HSV serotype 1 or serotype 2. The differential diagnosis for HSV hepatitis includes acute fatty liver of pregnancy, severe preeclampsia/HELLP syndrome. Other viral infections and exogenous exposures, including drug reactions, can cause hepatitis/liver failure. The first reported case of HSV hepatitis occurred in a pregnant woman in the third trimester in 1969.

### Conclusion

HSV hepatitis is a rare entity, but it should be considered as a differential diagnosis of hepatic dysfunction, particularly in the third trimester of pregnancy. Early treatment with Acyclovir results in significant reduction in mortality.