

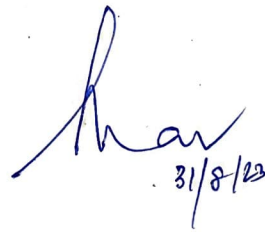
I have worked specifically in the field of Viral Hepatitis during pregnancy and the majority of my work is in this field. My scientific work in the field of Hepatitis E virus during pregnancy has led to better understanding of the various risk factors contributing to the severity of the disease. I had shown for the first time that host cell signalling through inflammatory transcription factor NF- κ B plays a pivotal role in acute liver failure in pregnant women (Molecular Medicine 2007 ,13 (9):518-26)

In another study of mine I had reported that reduced expression of Progesterone receptor (PR), Progesterone inducing blocking factor (PIBF), High HEV viral Load, IL12/IL10 ratio predicted poor outcome in HEV infection during pregnancy (Journal of Hepatology 2011 Jun 1:54(6):1107 -13). In one of my studies, I had reported that HEV viral load was significantly higher in pregnant women was higher in pregnant women compared to non-pregnant women. Further, the high HEV viral load and the high estrogen, progesterone and B-hCG levels could be the risk factors to account for the severity of the illness during pregnancy (ACG 2008 :103(10)2495-501). In another interesting study, I have reported that HEV replicates in the placenta which is an extra hepatic site during pregnancy and this contributes to high mortality during pregnancy (Journal of General Virology 2014 Jun 1:95(6):1266-71)

I have also reported that there is a significant role of ORF2 Capsid gene in patients of Acute Liver failure In North India due to HEV virus infection. 5 Unique synonymous substitutions and one non synonymous substitution along with Novel mutation, P259S in the capsid gene were identified, which may be associated with poor outcome in the patient (Archives of virology.2014 Dec ;159(12):3391-4)

I had also reported recently that high estrogen levels during pregnancy is a significant predictor for preterm delivery and maternal mortality in HEV infected pregnant women. Further ESR2- Beta levels were also predictors for maternal mortality in pregnant women (Liver international 2019 Apr;39 (4):633-9)

Interestingly, I had also observed that pregnancy appears to be a potential risk factor for HEV replication and an extremely low immune status of the Indian /Asian pregnant women. It has been suggested diminished cellular immunity (indicated by a decrease in CD4 ,an increase in CD8 cell counts and lowered CD4/CD8 cell ratio) and a high level of steroid hormones that influence viral replication /expression during pregnancy appear to be the plausible reasons for the severity of the disease(J Gastroenterol Hepatol.2007 May;22(5):676-82.)


31/8/23