

# Jaundice During Antenatal Period: Maternal Outcome in a Tertiary Care Hospital

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## ABSTRACT

**Background:** There are so many factors that are cared of during the antenatal period, Jaundice is one of them and very important one. Aim of current study was to know the etiological factors of jaundice among pregnant patients, outcome and their management.

**Methods:** This study done in the Department of Obstetrics & Gynaecology, Era's Lucknow Medical College and Hospital among pregnant patients with jaundice admitted in obstetric wards and labour room in 6 months duration from January 2016 to June 2016.

**Results:** Among total admissions, 65 patients presented with jaundice. Out of all admissions 20 were HBSAg, 8 HEV, 7 HCV, 5 of HBSAg and HEV co-infection, cholestasis with pregnancy 12 and 7 patients with pre-eclamptic liver disease with HELLP.

**Conclusions:** Jaundice in pregnancy may be deadly to mother and fetus. As the course of disease is also rapid and in short

period it may affect the fetus in utero also, early detection and prompt management of these cases should be done.

**Keywords:** Pregnancy, Jaundice, Viral Markers, Hepatic Encephalopathy.


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## Article History:

Received: 03-07-2016, Revised: 21-07-2016, Accepted: 29-07-2016

## Access this article online

Website: <a href="http://www.ijmrp.com">www.ijmrp.com</a>	Quick Response code 
DOI: 10.21276/ijmrp.2016.2.4.049	

## INTRODUCTION

Jaundice in pregnancy whilst relatively rare, has potentially serious consequences for maternal and fetal health.<sup>1</sup> Incidence of jaundice in pregnancy in developing country is much higher, due to poor nutrition and poor sanitation.

Jaundice in pregnancy can be caused by viral hepatitis, intrahepatic cholestasis of pregnancy, choledocholithiasis, HELLP syndrome (hemolysis, elevated liver enzymes, and a low platelet count), severe preeclampsia, and acute fatty liver of pregnancy.<sup>2</sup> Course of hepatitis is unaltered by pregnancy the exception is hepatitis E, where the pregnant women who contract the disease exhibit fatality rates of 10-15%.<sup>3</sup> Jaundice in the pregnancy can be a grave prognosis for both mother and fetus, causing maternal mortality in 10%.<sup>4,5</sup> Most common cause of jaundice is viral hepatitis, hepatitis B is most commonly involved. Early detection and management can prevent the dreaded complications of jaundice like hemorrhage and encephalopathy. Therefore, we planned this study in our hospital setting to know the prevalence of Jaundice during antenatal period and also maternal outcomes due to the same.

## METHODS

This study was conducted among pregnant patients with jaundice admitted in the antenatal wards and labour room of department of obstetrics and gynaecology, Era's Lucknow Medical College and

Hospital. The duration of study is 6 months January 2016 to June 2016. Both primigravida and multigravida were included in the study. Complete history was taken, mode of onset, progression and duration of the disease was undertaken. Patients were investigated for routine CBC, liver function test and coagulation profile.

## RESULTS

Among the total patients admitted in the ward, 65 patients aged 20-42 years were found to have jaundice at the time of the study. Most of the patients with jaundice were primigravida 36 and 29 were multigravida. 38 patients were unbooked and 2 booked cases but showed an irregular follow up. 44 patients belonged to rural background and 21 lived in urban areas. According to socioeconomic condition, 28 belonged to lower middle class, 26 to middle class and 11 to upper class.

As far as causes of jaundice are considered, 20 cases were because of HBSAg, 8 due to HEV, 7 due to HCV, 5 of HBSAg and HEV co-infection, cholestasis with pregnancy 12 and 7 patients with pre-eclamptic liver disease with HELLP (Table 4). 36 patient were at term >37 weeks and 29 patients before term <37 weeks gestation. Among these patients 5 patients reported in very serious condition with severe jaundice and deep coma. These were the drastically ignored cases of hepatic encephalopathy.

Their management was planned according to gestational age. Those who were preterm 2 doses of betnesol 12 mg was given 24 hours apart for lung maturity. Total 38 LSCS done, out of which 30 were elective LSCS and 8 were done due to failed induction. Out of 26 deliveries, 18 delivered spontaneously and 8 were induced. The jaundice in pregnancy can be fatal. The course of disease may suddenly deteriorate even after delivery. Rapid progression of disease, leads to hepatic failure, altered coagulation profile, uncontrolled bleeding and finally multiorgan failure.

Table 1: Obstetric history (n=74).

Parity	N
Primigravida	36
Multi gravid	29

Table 2: Booking status.

	N
Not enrolled	38
Enrolled	27

Table 3: Socioeconomic status.

Status	N
Lower middle class	28
Middle class	26
Upper class	11

Table 4: Etiological factors of jaundice in pregnancy.

Causes of Jaundice	(N)	%
Hepatitis B	20	2.55%
Hepatitis E	8	0.89%
Hepatitis C	7	0.76%
Hepatitis B and HEV co-infection	10	0.64%
Cholestasis of pregnancy	12	1.60%
Pre-eclamptic liver diseases with HELLP	7	0.90%

Table 5: Mode of delivery.

LSCS (38)	N
Elective LSCS	30
Failed induction/progress	8
Vaginal delivery (27)	
Spontaneous	18
Induced	09

## DISCUSSION

Incidence of jaundice in pregnancy varies around the world, in developed countries incidence is around 0.1%, and in developing countries incidence is much higher ranging 3-20%. In our study incidence was 4.23%. Viral hepatitis is the most common etiological agent causing jaundice in pregnant females.<sup>6</sup> Cholestasis of pregnancy is another cause of jaundice among pregnant females occurring in about 1%, similar to study done by Joshi D et al. (2010).<sup>7</sup> In our study the most common maternal

complications was hepatic encephalopathy, DIC (disseminated intravascular coagulation), sepsis and multiorgan failure, which were comparable to those stated by Tripti Nagaria et al. (Encephalopathy (26.7%), DIC 15.38%). Similar to the Tripti Nagaria et al.<sup>8</sup> study the maternal mortality was 14.4%. However it was more than found in study by Sapre & Joshi et al.<sup>9</sup> in 2009 of 4.99%. Most of the cases in our study were referrals from rural areas and unbooked cases which may account to increased mortality rates.

## CONCLUSION

Jaundice in pregnancy may be lethal to mother and fetus. As the course of disease is also rapid and in short period it may affect the fetus in utero also, early detection and prompt management of these cases should be done. Cases diagnosed at periphery should be immediately referred to higher centre for better management. Management of these patients involves multidisciplinary approach by the obstetricians, medicine, gastroenterology doctors and for serious ICU admissions, help of anesthesiologist is also required.

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**Source of Support:** Nil. **Conflict of Interest:** None Declared.

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**Cite this article as:** Maha Kazim, Anshumala Rastogi. Jaundice During Antenatal Period: Maternal Outcome in a Tertiary Care Hospital. *Int J Med Res Prof*. 2016; 2(4):202-03.