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Original Research

Assessment of Fetal and maternal outcome in pregnant females with jaundice

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ABSTRACT

Background: Pregnancy-related jaundice is a serious medical condition that is frequently observed in underdeveloped nations like India. Increased prenatal morbidity and mortality are linked to jaundice, specifically from placental insufficiency, premature labor, fetal discomfort, and intrauterine fetal death. The present study was conducted to assess fetomaternal outcome in pregnant females with jaundice.

Materials & Methods:70 antenatal cases with jaundicewas recruited. A thorough obstetrical, systemic, and general examination was conducted.

Results: Age group 20-25 years had 36, 26-30 years had 20 and >30 years had 14 patients. The etiology of jaundice was preeclampsia in 16, hepatitis in 24, acute fatty liver disease in 15, cholestasis in 8 and preeclampsia with HELLP syndrome in 7 cases. HAV positive were 5, HCV positive 3, HBsAg positive 8, HEV positive 6 and HAV positive 2. The difference was significant (P< 0.05). Among 48 delivered, 36 had improved discharge, 7 transferred to MICU and 5 expired. Among 22 undelivered, 6 had improved discharge, 4 transferred to MICU and 2 took LAMA, and 10 expired. The difference was significant (P< 0.05).55 discharged healthy, 7 had still birth and 8 had early neonatal death. The difference was significant (P< 0.05).

Conclusion: Pregnancy complications caused by jaundice have a negative impact on both the mother and the fetus. A female patient who has been admitted with jaundice has to receive therapy right away from a skilled medical staff.

Key words: Jaundice, fetus, premature labor

Introduction

Pregnancy-related jaundice is a serious medical condition that is frequently observed in underdeveloped nations like India. Increased prenatal morbidity and mortality are linked to jaundice, specifically from placental insufficiency, premature labor, fetal discomfort, and intrauterine fetal death.[1,2] A better fetomaternal result can be achieved by developing efficient strategies for illness prevention, control, and patient treatment with the aid of an understanding of disease consequences. People know a fair amount about jaundice, but they know relatively little about its kinds and problems.[3] This needs to change with proper education starting in the antenatal period. Viral hepatitis is the most common cause of jaundice during pregnancy. Most viral hepatitis infections (including hepatitis A, B, C, and D) do not progress much during pregnancy.[4] Nonetheless, it has been discovered that pregnant women who have both hepatitis E and disseminated herpes simplex virus (HSV) infections experience a more severe course of viral hepatitis.[5] A severe form of hepatitis E, which usually affects men and non-pregnant women as benign hepatitis infections, can infect pregnant women. The incidence of fulminant liver failure and mortality is significantly higher than that of other hepatic virus infections.[6]The present study was conducted to assess fetomaternal outcome in pregnant females with jaundice.

Materials & Methods

The present study comprised of 70 antenatal cases with jaundice. All gave their written consent to participate in the study.

Data such as name, age, etc. was recorded. The patient's complete medical history, including the beginning, development, and evolution of symptoms like anorexia, yellow urine, nausea, vomiting, fever, stomach and epigastric pain, diarrhea or constipation, weakness, and irritability was recorded. A thorough obstetrical, systemic, and general examination was conducted. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significan

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Results

Table: I Distribution of patients

Age group (years)	Number	P value
20-25	36	0.05
26-30	20	
>30	14	

Table I shows that age group 20-25 years had 36, 26-30 years had 20and >30 years had 14 patients.

Table: II Assessment of parameters

Parameters	Variables	Number	P value
Etiology	Preeclampsia	16	0.05
	Hepatitis	24	
	Acute fatty liver disease	15	
	Cholestasis	8	
	Preeclampsia with HELLP Syndrome	7	
jaundice cases according to hepatitis	HAV positive	5	0.82
	HCV positive	3	
	HBsAg positive	8	
	HEV positive	6	
	HAV positive	2	

Table II shows that the etiology of jaundice was preeclampsia in 16, hepatitis in 24, acute fatty liver disease in 15, cholestasis in 8 and preeclampsia with HELLP syndrome in 7 cases. HAV positive were 5, HCV positive3, HBsAg positive8, HEV positive6 and HAV positive2. The difference was significant (P< 0.05).

Table: III Maternal outcome

Parameters	Delivered (48)	Undelivered (22)	P value
Improved discharge	36	6	0.05
Transfer to MICU	7	4	
LAMA	0	2	
Expired	5	10	

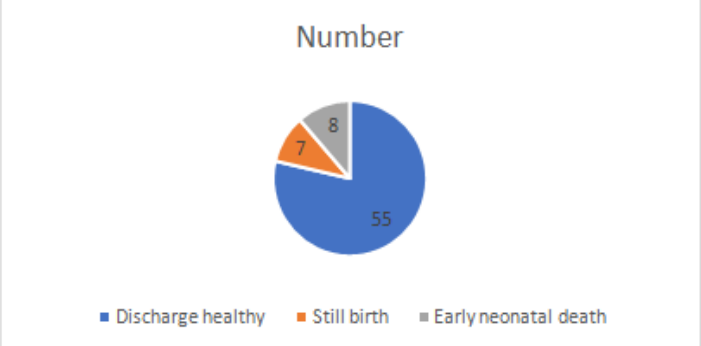
Table IIIshows that among 48 delivered, 36 had improved discharge, 7 transferred to MICU and 5 expired. Among 22 undelivered, 6 had improved discharge, 4 transferred to MICU and 2 took LAMA, and 10 expired. The difference was significant (P< 0.05).

Table: IV Neonatal outcome

Neonatal outcome	Number	P value
Discharge healthy	55	0.01
Still birth	7	
Early neonatal death	8	

Table IV, graph I shows that 55 discharged healthy, 7 had still birth and 8 had early neonatal death. The difference was significant (P< 0.05).

Graph: I Neonatal outcome



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Discussion

Pregnancy-related liver disease has several reasons, and it is often challenging to diagnose. For the mother's and the fetus's health, early diagnosis and efficient treatment are crucial. Hepatic disorders, which fall into many categories, complicate about 3% of pregnancies. The first is a varied group of patients with liver issues unique to pregnancy who were previously healthy.[7,8] These include liver dysfunction associated with preeclampsia, prenatal hyperemesis gravidarum, prenatal acute fatty liver, and prenatal intrahepatic cholestasis. Throughout puerperium, these issues go away on their own.[9,10]The present study was conducted to assess fetomaternal outcome in pregnant females with jaundice.

We found that age group 20-25 years had 36, 26-30 years had 20 and >30 years had 14 patients. In their study, Sharma et al[11] chose 30 pregnant individuals who had laboratory or clinical signs of jaundice. In our study, the majority were primigravida (66.6%), and the highest age of incidence was between 21 and 25 years old (66.6%). 60% of the patients were from lower socioeconomic backgrounds, 73.3% were from metropolitan areas, 93.3% were unbooked, and all instances were in the third trimester of pregnancy. When they were admitted, all of the patients had jaundice. The most prevalent initial symptom, which affected 60% of patients, was pruritus. Other problems included petechiae, nausea, elevated blood pressure, and abdominal pain. According to this study, the most common cause of jaundice, occurring in 46.7% of patients, was viral hepatitis. In this study, jaundice was also caused by preeclampsia and ICP. The incidence of hepatitis E was 13.3%, while the most frequent cause of acute hepatitis (26.7%) was hepatitis B. One case of hepatitis E coupled with coagulopathy and hepatic encephalopathy resulted in maternal death. FHF struck 2% of these patients. Every patient was under close observation in the intensive care unit. In 60% of cases, PPH was the most frequent maternal complication. In our study, one maternal fatality occurred. Twelve of the thirty patients experienced labor that started on its own. Eight (26.7%) of them were preterm and two of them died; four (13.3%) had IUFD; twelve (40%) experienced fetal distress with meconium-stained fluid; five (16.6%) had PROM; two (6.7%) had fetal growth restriction; and two (6.7%) were delivered without incident. All of them were delivered vaginally.

We observed in the study that the etiology of jaundice was preeclampsia in 16, hepatitis in 24, acute fatty liver disease in 15, cholestasis in 8 and preeclampsia with HELLP syndrome in 7 cases. HAV positive were 5, HCV positive 3, HBsAg positive 8, HEV positive 6 and HAV positive2. We found that among 48 delivered, 36 had improved discharge, 7 transferred to MICU and 5 expired. Among 22 undelivered, 6 had improved discharge, 4 transferred to MICU and 2 took LAMA, and 10 expired. 55 discharged healthy, 7 had still birth and 8 had early neonatal death. Agrawal et al[12] discovered that the prevalence of jaundice during pregnancy was 1.2% out of 122 cases that were enrolled. 48.4% of the patients were between the ages of 20 and 25. Approximately 69.7% of cases began between weeks 29 and 40 of pregnancy. The most frequent causes were cholestasis (23.75%), hepatitis (17.2%), and pre-eclampsia (33.6%). Hepatitis B accounted for 26.7% of all hepatitis cases. 59.8% of the 122 cases were delivered, whilst 50.2% were not. While 47.6% of patients died, 52.4% of patients recovered and were released. 56.1% of deliveries were vaginal, 43.9% were abdominal, and 64.6% of maternal deaths were due to hepatic encephalopathy. Patients with a total bilirubin level more than 10 mg% had a higher mortality rate. The perinatal death rate was 37%.

The limitation of the study is small sample size.

Conclusion

Authors found that pregnancy complications caused by jaundice have a negative impact on both the mother and the fetus. A female patient who has been admitted with jaundice has to receive therapy right away from a skilled medical staff.

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