

Original Research Article

FETOMATERNAL OUTCOME OF JAUNDICE IN PREGNANT FEMALES IN SMGS HOSPITAL, JAMMU – A 1-YEAR RETROSPECTIVE STUDY.

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ABSTRACT

Background: Jaundice in pregnancy is an important medical disorder, commonly seen in developing countries like India. The present study was conducted to assess fetomaternal outcome of jaundice in pregnant females. Materials and Methods: All antenatal women booked or unbooked presenting with clinical or laboratory evidence of jaundice were included. A comprehensive general, systemic, and obstetrical examination was performed. Results: Out of 29184 cases, jaundice was seen in 109, off which 98 were delivered and 11 undelivered. Age group 20-25 years had 53, 26-30 years had 30 and >30 years had 26 patients. The etiology of jaundice was cholestasis in 45, preeclampsia in 38, hepatitis in 7, acute fatty liver disease in 6, and anemia in 13 cases. Hepatitis A positive were 2, HBsAg positive 3 and HCV positive 2. The difference was significant (P< 0.05). Among 98 delivered, 90 had improved discharge, 2 expired, 6 took LAMA and among 11 undelivered, 8 had improved discharge, and 3 took LAMA. The difference was nonsignificant (P > 0.05). Out of 98 delivered, mode was vaginal in 42 and LSCS in 56 cases. The difference was non- significant (P> 0.05). Maternal complications were IUD seen in 4, IUGR in 14, PPH in 23, coagulopathy in 13, hepatic encephalopathy in 5, hepatorenal syndrome in 10, abruption in 15. ICU admission was seen in 33 and blood/ blood product transfusion in 36. The difference was significant (P< 0.05). Low birth weight babies were 31 and normal 67. Pre- term were 23 and term 75. Meconium- stained liquid was positive in 29 and negative in 69. APGAR at 1 minute <7 was seen in 11 and 7-10 in 87, APGAR at 5 minutes <7 was seen in 5 and 7-10 in 93. The difference was significant (P < 0.05).

Conclusion: Jaundice complicates pregnancy, which has poor maternal and fetal outcomes. A qualified team of doctors must provide prompt therapy to a female patient who has been admitted with jaundice. **Key words:** Jaundice, Pregnancy, Maternal.

INTRODUCTION

Jaundice in pregnancy is an important medical disorder, commonly seen in developing countries like India. Jaundice is associated with increased fetal morbidity and mortality, particularly from placental insufficiency, preterm labour, fetal distress and intrauterine fetal demise.^[1,2]

An understanding of disease complications can help to formulate effective strategies for disease prevention, control and patient management leading to better fetomaternal outcome. People have moderate knowledge on jaundice, especially very low knowledge over complications and types of jaundice, which has to be improved through adequate education from antenatal period itself.^[3] The most frequent cause of jaundice during pregnancy is viral hepatitis.^[4] Pregnancy has little impact on the progression of the majority of viral hepatitis infections (such as hepatitis A, B, C, and D). However, patients with hepatitis E and disseminated herpes simplex virus (HSV) infections have been found to have a more severe course of viral hepatitis in pregnancy.^[5] Pregnant women can get a serious type of hepatitis E, which typically affects males and non-pregnant women as benign hepatitis infections. As compared to other hepatic viral infections, fulminant hepatic failure and mortality rate are substantially more common.^[6] The present study was conducted to assess fetomaternal outcome of jaundice in pregnant females in SMGS Hospital, Jammu.

MATERIALS AND METHODS

This is a retrospective study of antenatal cases with jaundice admitted at the department of obstetrics and gynecology, SMGS Hospital Jammu for a period of one year (from July 2022 to June 2023) after taking ethical clearance. The data was collected to calculate the total number of pregnant females with jaundice, obstetrical, maternal and fetal outcome in these patients during the period of 1 year from July 2022 to June 2023.

Inclusion criteria were all antenatal women booked or unbooked presenting with clinical or laboratory evidence of jaundice and any gestation period. Exclusion criteria was non pregnant females. A thorough medical history of the patient, detailing the onset, course, and progression of symptoms such anorexia, yellow urine, nausea, vomiting, fever, epigastric and abdominal discomfort, constipation or diarrhea, irritability, weakness. and Α comprehensive general, systemic, and obstetrical examination was performed. Data thus obtained were subjected to statistical analysis. P value < 0.05was considered significant.

RESULTS

Table 1: Distribution of patients		
Parameters	Number	
Total cases	29184	
Jaundice	109	
Delivered	98	
Undelivered	11	

Table I shows that out of 29184 cases, jaundice was seen in 109, of which 98 were delivered and 11 undelivered.

Table 2: Distribution based on age group			
Age group (years)	Number	P value	
20-25	53		
26-30	30	0.05	
>30	26		

Table II shows that age group 20-25 years had 53, 26-30 years had 30 and >30 years had 26 patients.

Table 3: Assessment of para	nmeters		
Parameters	Variables	Number	P value
	Cholestasis	45	
	Preeclampsia	38	
Etiology	hepatitis	7	0.01
	Acute Fatty Liver disease	6	
	Anemia	13	
	Primi	51	
Domitry	G2	30	0.05
Parity	G3	24	0.05
	G4 and more	4	
Jaundice cases	Hepatitis A	2	
associated with	Hepatitis B	3	0.18
hepatitis	Hepatitis C	2	
	1-2	41	
S. bilirubin (mg%)	2-4	44	
	5-8	8	0.03
	8-12	11	
	>!2	5	

Table III shows that the etiology of jaundice was cholestasis in 45, preeclampsia in 38, hepatitis in 7, acute fatty liver disease in 6, and anemia in 13 cases. Hepatitis A positive were 2, HBsAg positive 3 and HCV positive 2. The difference was significant (P < 0.05).

Table 4: Maternal outcome			
Parameters	Delivered (98)	Undelivered (11)	P value
Improved discharge	90	8	0.01
Expired	2	0	0.92

LAMA	6	3	0.81

Table IV, graph I shows that among 98 delivered, 90 had improved discharge, 2 expired, 6 took LAMA and among 11 undelivered, 8 had improved discharge, and 3 took LAMA. The difference was non- significant (P> 0.05).

Table 5: Mode of delivery		
Mode of delivery (98)	Number	P value
Vaginal	42	0.76
LSCS	56	0.76

Table V shows that out of 98 delivered, mode was vaginal in 42 and LSCS in 56 cases. The difference was non-significant (P> 0.05).

Table 6: Maternal complications		
Complications	Number	P value
Blood/ blood product transfusion	36	
ICU admission	33	
РРН	23	
Abruption	15	
IUGR	14	0.02
Coagulopathy	13	
Hepatorenal syndrome	10	
Hepatic encephalopathy	5	
IUD	4	

Table VI shows that maternal complications were IUD seen in 4, IUGR in 14, PPH in 23, coagulopathy in 13, hepatic encephalopathy in 5, hepatorenal syndrome in 10, abruption in 15. ICU admission was seen in 33 and blood/ blood product transfusion in 36. The difference was significant (P < 0.05).

Table 7: Fetal complications			
Parameters	Variables	Number	P value
Birth weight	Low	31	0.05
	Normal	67	0.03
Gestation at birth	Pre- term	23	0.04
	Term	75	
Meconium- stained liquid	Positive	29	0.05
	Negative	69	
APGAR at 1 min	<7	11	0.03
	7-10	87	
APGAR at 5 min	<7	5	0.01
	7-10	93	0.01

Table VII shows that low birth weight babies were 31 and normal 67. Pre- term were 23 and term 75. Meconium- stained liquid was positive in 29 and negative in 69. APGAR at 1 minute <7 was seen in 11 and 7-10 in 87, APGAR at 5 minutes <7 was seen in 5 and 7-10 in 93. The difference was significant (P<0.05).

Table 8: Gestational age		
Gestational age	Number (%)	P value
29- 40 months	99 (90.8%)	
14-28 months	10 (9.17%)	0.01
0-13 months	0 (0)	

Table VIII shows that gestational age was 29- 40 months in 99 (90.8%) subjects and 14- 28 months in 10 (9.17%) subjects. The difference was significant (P< 0.05).



DISCUSSION

The causes of liver failure during pregnancy are numerous, and diagnosing it is frequently difficult.^[7] Early diagnosis and effective management are essential for the health of the mother and fetus.^[8] About 3% of all pregnancies are complicated by hepatic diseases, which can be divided into several groups. The first is a diverse group of previously healthy patients who have pregnancy-specific liver problems.^[9] These include prenatal intrahepatic cholestasis, prenatal acute fatty liver, and prenatal hyperemesis gravidarum and preeclampsia-related liver dysfunction. During puerperium, these problems resolve on their own.^[10] The present study was conducted to assess fetomaternal outcome of jaundice in pregnant females in SMGS Hospital, Jammu.

We found that out of 29184 cases, jaundice was seen in 109, of which 98 were delivered and 11 undelivered. Age group 20-25 years had 53, 26-30 years had 30 and >30 years had 26 patients. The etiology of jaundice was cholestasis in 45, preeclampsia in 38, hepatitis in 7, acute fatty liver disease in 6, and anemia in 13 cases. Hepatitis A positive were 2, HBsAg positive 3 and HCV positive 2. Among 98 delivered, 90 had improved discharge, 2 expired, 6 took LAMA and among 11 undelivered, 8 had improved discharge, and 3 took LAMA. Agrawal et al,^[11] found that out of 122 cases were enrolled, Incidence of jaundice in pregnancy was 1.2%. Majority of patients were of age group 20-25 years 48.4%. About 69.7% presented at gestational age of 29-40 weeks. Most common cause was pre-eclampsia 33.6%, followed by cholestasis 23.75% and hepatitis 17.2%. Amongst hepatitis, most common was hepatitis B in 26.7%. Out of 122 cases, 59.8% delivered while 50.2% were undelivered 52.4% patients improved and were discharged while 47.6% patients expired. Vaginal deliveries were 56.1%, abdominal deliveries were 43.9%, and main reason for maternal mortality was hepatic encephalopathy in 64.6%. Mortality was higher in patients with total bilirubin > 10mg%. Perinatal mortality was 37%.

We found that out of 98 delivered, mode was vaginal in 42 and LSCS in 56 cases. The maternal complications were IUD seen in 4, IUGR in 14, PPH in 23, coagulopathy in 13, hepatic encephalopathy in 5, hepatorenal syndrome in 10, abruption in 15. ICU admission was seen in 33 and blood/ blood product transfusion in 36. Low birth weight babies were 31 and normal 67. Pre- term were 23 and term 75. Meconium- stained liquid was positive in 29 and negative in 69. APGAR at 1 minute <7 was seen in 11 and 7-10 in 87, APGAR at 5 minutes <7 was seen in 5 and 7-10 in 93. Sharma et al¹² in their study 30 antenatal patients with clinical /laboratory evidence of Jaundice were selected. The peak age of incidence in our study was 21-25 years (66.6%) and majority were primigravida

(66.6%). All cases were in third trimester of pregnancy, 93.3% were unbooked, 73.3% were term, 60% were of lower socioeconomic status and 73.3% were urban. All patients presented with jaundice at time of admission. Pruritus was most common presenting symptom present in 60% of patients. Other presenting complaints were nausea, high BP, abdominal pain and petechiae. Viral Hepatitis was most important cause of jaundice in this study found in 46.7% of cases. Preeclampsia and ICP were other causes of jaundice in this study. Hepatitis B was the most common cause of acute hepatitis (26.7%) and incidence of hepatitis E. was.^[13] 3% in our study. Maternal mortality was found in 1 case of hepatitis E complicated with hepatic encephalopathy and coagulopathy. 2% of these patients developed FHF. All patients were kept in ICU for intensive monitoring. PPH was most common maternal complication in 60% of patients. There was 2 maternal death in our study. Of 30 patients, 12 had spontaneous onset of labour. All delivered vaginally of which 8(26.7%) were preterm of which 2 died, 4(13.3%) were IUFD, 12 (40%) had fetal distress with meconium stained liquor, 5 (16.6%) had PROM, 2 (6.7%) had fetal growth restriction and 2 (6.7%) delivered uneventfully.

CONCLUSION

Authors found that jaundice complicates pregnancy, which has poor maternal and fetal outcomes. A qualified team of doctors must provide prompt therapy to a female patient who has been admitted with jaundice.

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