

JAUNDICE IN PREGNANCY

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SUMMARY

Jaundice in pregnancy is relatively uncommon. Over an 8 years period 36 patients were admitted with jaundice in pregnancy at our hospital (an incidence 1 in 850 pregnancies). Viral hepatitis was the commonest cause of jaundice and majority presented in third trimester. Eleven out of the 36 patients died because of jaundice. Fetal wastage was also very high. Jaundice in pregnancy seems to carry a poor prognosis in women who are poorly nourished.

Jaundice is a manifestation of hepatobiliary dysfunction and its association with pregnancy is relatively uncommon. It occurs in about one out of every 1,500 gestations an incidence of 0.067% (Haemmerli, 1966). Amongst the different causes of jaundice incidental to pregnancy, virus hepatitis is the commonest cause accounting for 41% of cases. (Yip & Baker, 1985; Sherlock, 1989). Impact of jaundice is profound particularly in developing countries on maternal and perinatal outcome (Christie et al, 1976, Khuroo and Teli, 1981). One factor which is probably responsible is the malnourished status of these women which is exacerbated by pregnancy and put under further stress by a disease process like viral hepatitis. The present study evaluates the incidence of jaun-

dice in pregnancy at our institute and its impact on maternal morbidity and fetal outcome.

OBSERVATIONS

A retrospective study of all patients admitted with jaundice in pregnancy at JIPMER hospital over a period of 8 years (1984-1991) was undertaken. Total number of admissions to antenatal wards during this period was 30,845 out of which thirty six patients were with jaundice in pregnancy and these form the present study group.

Majority of the patients were young. 26 patients were below the age of twenty five years and 18 of them were primigravida (50%), 8 patients were second gravida. A large number of these patients presented with jaundice in the third trimester (77.7%). All but two patients had jaundice clinically, the remaining had

abnormal liver functions. Only 5 patients had a normal haemoglobin, 3 patients were severely anaemic and the remaining showed moderate anemia. Half of the patients had pedal oedema, one patient had severe pregnancy induced hypertension (PIH) and two patients presented with eclampsia.

Cause of jaundice was viral hepatitis in 31 patients (Table I). At admission higher functions were normal in most patients except in

Table I

Cause of Jaundice	No. of Patients
Viral Hepatitis	31
Eclampsia	2
Severe PIH	1
Obstructive Jaundice	1
Drug induced	1
Total	36

five. Two patients were drowsy, two were slightly disoriented and one patient was in grade IV coma. Two patients had hepatic flap. Clotting time was prolonged in 3 patients and they showed bleeding from injection sites and one of them also had bleeding from gums. Bilirubin was elevated in all the patients and the transaminases were significantly raised. Serum HBS Ag was done only in 16 cases of which 8 showed positivity. One of these patients also had malarial parasitic infection. She recovered on treatment with chloroquine and could be discharged.

One patient died because of hepatic failure and two patients were discharged in critical condition on request before delivery. Twenty three women delivered and ten women recovered from jaundice and were discharged with

an advised to attend antenatal clinic. The course of their pregnancy and the outcome were normal. Out of the 23 women, twelve had spontaneous vaginal deliveries whereas 11 had operative deliveries (Table II).

Table II
Type of Operative delivery

Type of Operative delivery	No. of Patients
Caesarean section	5
Low forceps	2
Low mid forceps	1
Assisted breech	1
Breech extraction	1
Vacuum rotation and extraction	1
Total	11

Out of the 5 caesarean sections three were for foetal distress, one for obstructed labour and one for a compound presentation (head with hand). Three patients had twin pregnancies. Post partum haemorrhage was seen in 6 cases and infection in one, nine patients had preterm deliveries. Out of 23 deliveries 13 were live births, 4 babies were IUGR and one had congenital ascitis and hydrothorax.

Total number of maternal deaths during 1984-1991 at JIPMER were 88 of which 11 were due to jaundice in pregnancy (12.5%). Eight of these were primigravida and all presented with jaundice in the third trimester of which five had preterm deliveries. One patient died undelivered and the remaining ten during the post partum period. Seven of these patients had viral hepatitis (Table III). Immediate cause of death in six patients was hepatic failure, one patient sustained intracranial

Table III

Cause of maternal deaths	No. of Patients
Viral hepatitis	7
Drug induced hepatitis	1
Eclampsia	2
Severe PIH	1
Total	11

haemorrhage following eclampsia, one patient had acute renal failure, two patients had PPH and one died because of coagulopathy. Hospital stay of these women who died was very short. Only one woman stayed in the hospital longer than 10 days. Nine of them were admitted 1-2 days prior to the death as a result very little could be done to investigate and institute any treatment. Only two patients had liver biopsy, one showed evidence of viral hepatitis and the other showed drug induced hepatitis.

DISCUSSION

Incidence of jaundice in pregnancy is very low in developed countries i.e. 1 in 1,500 pregnancies. But in underdeveloped and developing countries where general incidence of hepatitis is high, incidence of jaundice in pregnancy is also high. Sarkar et al (1992) reported an incidence of 1 in 429 pregnancies from Calcutta.

In this study we had an incidence of 1 in 850 pregnancies. Chauhan et al (1991) reported 30 cases of jaundice pregnancy out of 2892 admission.

It was difficult to diagnose exact cause of jaundice in majority of the cases and most were diagnosed based on clinical history and biochemical data, viral hepatitis was the commonest cause of jaundice in our series and it

predominantly presented in the third trimesters (Sherlock. 1968). A favourable outcome may be expected for the mother with hepatitis in Europe, U. S. A. (Adams & Combes 1965; Haemmerli 1966). High mortality rates are reported from areas where undernutrition is frequent (Paul and Roy 1986; Subodh Singh et al 1991). We had 11 mothers dying because of jaundice out of 36 patients. The exact cause of increase in mortality cannot be assessed because the hospital stay of nine out of eleven of these women was less than 48 hours. Associated anaemia, hypoproteinemia, poor nutritional status could contribute. Hepatitis is the third commonest cause of maternal morbidity in India (Rao K. B. 1975) and several authors have reported jaundice as a cause for maternal mortality in 10-20% of patients (Paul and Roy 1986). As the commonest cause of jaundice in pregnancy is viral hepatitis all possible preventive measures should be taken. In view of the reported high maternal mortality because of jaundice, WHO expert committee on hepatitis (1964) has recommended that gamma globulins should be given to women exposed to the disease. In general the management of viral hepatitis is similar as in the non-pregnant. The cause of jaundice/hepatitis is not affected by the termination of pregnancy and it should be avoided as it adds the strain of operation to a patient with an already failing liver (Sherlock 1989).

The effects on fetus have been variously reported. Hepatitis is said to cause abortion or premature delivery. The survival rate depending on the stage of maturity at birth and not on mothers disease (Haemmerli 1966). Others have not observed increased fetal wastage (Cahill 1962, Adams & Combes 1965). The infants born of mothers with viral hepatitis do not show evidence of neonatal hepatitis (Alterman, 1963). Fetal wastage was high in the present series (10 out of 23). Perinatal mortality of 41% was reported by Sarkar et al 1992 and others (Konar et al 1975; Kochar et

al 1975) reported equally high mortality.

Jaundice because of acute fatty liver of pregnancy (AFLP) usually occurs in third trimester. Early diagnosis is important as early delivery appears to improve the prognosis (Haemerli 1966), whereas it is best avoided in viral hepatitis. Biochemical liver function tests and serology for viral hepatitis may take valuable time. Liver biopsy may be needed but is difficult to perform in the presence of Coagulopathies. CT scan may be of use in diagnosis of AFLP. However prognosis is very poor in AFLP, only 6 of 40 cases surviving (Haemerli 1966) and the fetal wastage is also equally high.

CONCLUSION

Incidence of jaundice in pregnancy due to viral hepatitis is very high because of viral hepatitis is very high in this region. Poor nutritional status and anaemia add to the problem and might contribute for increased maternal as well as perinatal morbidity. Preventive measures are necessary and where the problem arises close cooperation between the physi-

cian, obstetrician and paediatrician is essential to ensure a safe and successful outcome of pregnancy.

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