

Intrahepatic Cholestasis Jaundice of Pregnancy

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Summary

Intrahepatic cholestasis of pregnancy (IHCP) is a relatively benign cholestatic disorder with poor perinatal outcome. Five women with cholestasis of pregnancy were reviewed. Ten pregnancies has been affected with resultant perinatal morbidity and mortality in 8. The significance attached to pruritus in pregnancy is often minimal but it is a cardinal symptom of cholestasis of pregnancy. Treatment of Ursodeoxycholic acid, a choleric agent, result in rapid clinical improvement and resolution of deranged biochemistry but does not reduce the associated poor perinatal outcome.

Introduction

Intrahepatic cholestasis of pregnancy characterized by skin pruritus and a biochemical cholestasis of mild to moderate severity appearing during pregnancy (mainly in third trimester) and disappearing after delivery. It recurs in 40-60% of future pregnancies. The intensity of pruritus and the laboratory alterations (increased serum bile salts and transaminases in all patients), fluctuate during one pregnancy and also vary in subsequent affected pregnancies.

Cholestasis of pregnancy is associated with increased fetal morbidity and mortality and should be treated actively. The significance attached to pruritus in pregnancy is often minimal, but it is a cardinal symptom of cholestasis of pregnancy, which may have no other clinical features.

Material and Methods

We have been associated with five cases (10 pregnancies) of intrahepatic cholestasis of pregnancy at

Kamla Raja Hospital, between 1996 and 1997. All cases were managed expectantly except two. The clinical course and management of these patients is tabulated here.

In all cases:

1. In first pregnancy jaundice did not usually develop
2. The most common complaint was pruritus
3. Serum bilirubin and alkaline phosphatase was raised (level of S. bil ranges from 2-20 mg%)
4. USG showed normal liver without evidence of obstructive jaundice.
5. Liver biopsy was not done in any case.
6. Management was conservative and symptomatic in all cases except in two in which 2 courses of Udiliv was given.
7. Blood transfusion was given whenever necessary.
8. Patients were given bed rest, folic acid supplement soothing lotions for pruritus.
9. Prophylactic vit. K was given before delivery.
10. There was no significant family medical and personal history. No h/o taking oral contraceptives.
11. Perinatal morbidity and mortality is high i.e. IUGR, fetal distress, SB, neonatal death.

Discussion

Intrahepatic cholestasis of pregnancy (IHCP) is a relatively benign cholestatic disorder that generally commences late in pregnancy disappears abruptly after delivery and frequently recurs in subsequent pregnancies.

In present study pruritus is the only symptom and can occur as early as two months (8 weeks) and disappear abruptly after delivery as reported by Davies - et al 1997; Reyes - 1997, Alsulyman - et al 1966.

Reyes 1997 reported that this disease has no meaningful consequence for the mother; in contrast it is associated with an increased risk of foetal distress, causing premature deliveries and still births. In present study ten pregnancies have been affected by cholestasis of pregnancy with resultant perinatal morbidity and mortality in 10 - still birth 3, one neonatal death, 2 premature births, 2 IUGR and 2 emergency CS for foetal distress.

The two pregnancies were treated actively with two identical periods of treatment of Ursodeoxycholic

acid 1 gm/day for 2 days separated by a 14 day interval free of drug. Pruritus and serum levels of total bile salts improved significantly during treatment with Ursodeoxycholic acid but relapsed after the drug was discontinued but they improved again when Ursodeoxycholic acid was readministered as reported by Alsulyman et al 1996, Davies et al 1995, Palma et al 1992, Reyes 1997. There was maternal improvement in the patients treated with Ursodeoxycholic acid but fetal prognosis did not improve as both patients delivered prematurely as reported by Reyes 1997 though Palma et al 1992 reported good fetal outcome.

Conclusion

Cholestasis of pregnancy though benign has perinatal morbidity and mortality. Pruritus is the cardinal symptom and might have not other clinical features. Ursodeoxycholic acid administration provides a significant improvement in maternal pruritus & level of biochemical abnormalities does not affect maternal or perinatal prognosis too much. Ursodeoxycholic acid seemed to provide safe and effective therapy but should be confirmed in controlled clinical trials.

Table 1
1st case, 25 yrs, G₃P₃

	1 st Pregnancy	2 nd pregnancy	3 rd pregnancy
1. Booked / Unbooked	Booked	Booked	Booked
2. Specific symptoms	-	Pruritus at 9 mths.	Pruritus at 3 months, with loss of fetal movement
3. Specific Investigations	-	S. Bil. 2.2 mg%	S. Bil. 5.2 mg%
4. Mode of delivery	F.T.N.D.	F.T.C.S	F.T.S.B. vaginal delivery
5. Complications	-	-	(-Severe PPH)
6. Fetal Outcome	FA/H 5 yrs.	MA/H 3 yrs	SB
7. Disappearance of manifestation	-	After 15 days S. bil became normal.	Same as 2 nd pregnancy

Table II
2nd case, 28 yrs, G₃P₃

	1 st Pregnancy	2 nd pregnancy	3 rd pregnancy
1. Booked / Unbooked	Booked	Booked	Booked
2. Specific symptoms	-	Pruritus at 2 mths. Jaundice at 3 months	Pruritus at 2nd months & jaundice at 3 rd month
3. Specific Investigations	-	S. Bil. 0.9 mg% raised to 11 mg % on follow up	S. Bil. 0.9 mg% raised to 20 mg% at 4 months persisted till term.
4. Complications	-	-	-
5. Mode of delivery	F.T.N.D.	F.T.C.S	F.T.C.S. at 37 wks severe IUGR
6. Fetal Outcome	F A/H 6 yrs.	IUGR M 3 yrs A/H	Severe IUGR at 37 wks, wt. 1.5 kg.
7. Disappearance of manifestation	-	Jaundice disappeared within 1 wk, S. Bil. Normal by 16 days	Same as in 2 nd pregnancy.

Table III
3rd Case, 28 yrs, G5P3A1.

	1 st Pregnancy	2 nd Pregnancy	3 rd Pregnancy	4 th Pregnancy	5 th Pregnancy
1. Booked/Unbooked	Unbooked	Unbooked	Unbooked	Unbooked	Unbooked
2. Specific symptoms	-	-	Jaundice at 5 months	Pruritus at 5 months	Pruritus & Jaundice at 5 months
3. Specific Investigation	-	-	S.Bil. 3.2mg%	S.Bil. 2.2mg% at term	S.Bil. 3.6mg%
4. Mode of delivery	-	F.T.N.D.	F.T.N.D.	F.T.SB	F.T.C.S fetal distress
5. Complication	-	-	-	-	-
6. Fetal Outcome	-	M 6 yrs A/H	M. died on 3 rd day	SB	Male A/H
7. Disappearance of manifestation	-	-	Jaundice disappeared on 7 th day.	Same as 3 rd pregnancy	Same as 3 rd pregnancy

Table IV
4th Case, 25 yrs, G2P2

	1 st Pregnancy	2 nd pregnancy
1. Booked/Unbooked	Booked	Booked
2. Specific symptoms	Pruritus and jaundice at 4 th month	Pruritus and jaundice at 4 th month
3. Specific Investigation	S. Bil. 6 mg%	S. Bil. raised to 2.2 mg%
4. Mode of delivery	Terminated by periphery doctor for jaundice	Had PROM & delivered prematurely at 34 wks.
5. Complication	Premature	Premature vaginal delivery
6. Fetal Outcome	SB	Fair
7. Disappearance of manifestation	-	During ANC pruritus disappear after taking course of udiliv for 21 days but again reappear for which 2 nd course of udiliv given.

Table V
5th Case. 18 yrs. G1 P1

	1 st Pregnancy
1. Booked / Unbooked	Booked
2. Specific symptoms	Developed Jaundice & pruritus at 4 th month.
3. Specific Investigation	S. Bil. Raised upto 13 mg % but after taking udiliv comes to 2.2 mg%
4. Mode of delivery	Delivered vaginally at 36 wks.
5. Complication	Had PROM at 32 wks. but continued on conservative line.
6. Fetal Outcome	36 wks baby with 2.2 kg wt. A/.H.
7. Disappearance of manifestation	Because of treatment pruritus disappeared during ANC only.-

References

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