

RECURRENT JAUNDICE IN PREGNANCY

by

SAMAR KUMAR BASU,* M.D.

S. F. JALNAWALLA,** F.R.C.O.G.

and

D. SARKAR,*** B.Sc. (Hons.), A.I.C.

Introduction

Idiopathic recurrent cholestatic jaundice in pregnancy was thought to be a very rare occurrence in our country. Case reports had been published in western literature, particularly from Scandenevian countries. But this entirely benign hepatic disorder in pregnancy had very rarely been reported in Indian literature.

Material and Methods

The material comprised of 15 patients collected after careful review from the study of different cases of jaundice complicating pregnancy during last 6 years. Most of the patients in this series were admitted in 3rd trimester with symptoms of itching or jaundice. None of them had any general symptoms like nausea, fatigue, anorexia, pyrexia, pain, etc. Nine patients had little bit of scratch marks, over their skin. Their medical history revealed no drug known to produce intrahepatic cholestasis had been taken during pregnancy state. However,

there was history of taking oral contraceptives prior to present or previous pregnancy in 4 patients. None of the patients gave any history of contact with jaundiced person during pregnancy. The diagnosis was completely based on clinical course of the disease, signs symptoms and laboratory examinations. In all the patients serum bilirubin (Direct and total), alkaline phosphatase, thymol turbidity, SGOT/PT were estimated. In addition, haemoglobin, urine for bile salts and bile pigments and serum proteins were tested. Liver biopsy had only been performed in 2 cases with special precaution as it is held to be dangerous for routine use particularly in pregnancy. BSF Test was discarded.

Observations

Course of Pregnancy and Outcome of Labour: Thirteen (86.6%) patients experienced the onset of symptoms in late pregnancy. Incidence of premature birth according to gestation was 26.6% (Table I). Out of 15 total babies, 6 babies de-

*Registrar.

Department of Obstetrics and Gynaecology,
Safdarjang Hospital, New Delhi.

**Consultant.

Department of Obstetrics and Gynaecology,
Safdarjang Hospital, New Delhi.

***Junior Biochemist.

Special Biochemical Laboratory, Safdarjang
Hospital, New Delhi.

Accepted for publication on 26-9-78.

TABLE I
Number of Cases With Duration of Pregnancy

Group	Pregnancy continued	No. of cases
I	<37 weeks	4 (26.6%)
II	>37 weeks	11 (73.4%)

veloped physiological jaundice within first week of delivery. One baby died of prematurity. Mild to moderate P.P.H. at the time of delivery was encountered in 3 patients, which was managed conservatively. The symptoms disappeared in all the cases within 2 weeks of delivery.

Laboratory Investigations: Laboratory studies from our patients presented a picture of intrahepatic cholestasis (Table II). A rise in serum bilirubin was present in all the cases. Values of serum alkaline phosphatase were well above the limit of normal values found in pregnancy. SGOT/PT values were also increased in most of the cases. No pathological values were recorded for thymol turbidity. Overall higher liver function test values observed in patients delivered before 37 weeks.

Puerperium: All the patients had uneventful puerperium. Liver function tests, values, except serum alkaline phosphatase became normal within 8-10 days of delivery. However, repeat liver function tests during follow up after 6 weeks were normal in all the cases.

Discussion

Idiopathic recurrent cholestatic jaundice is an entirely benign hepatic disorder during pregnancy primarily in its last trimester. It is mostly characterised by its recurrence during next pregnancy, itching and or jaundice, absent or mild form of general symptoms as nausea, fatigue, anorexia, pyrexia, etc. This disorder is due to disturbance of liver and bile function caused by relative insufficient enzyme function in liver cells particularly during later part of pregnancy

TABLE II
Laboratory Test Values in Different Groups

Investigations	Group I		Group II	
	Mean	Range	Mean	Range
Serum bilirubin (mg/100 ml.)				
Total	2.98	2.6 - 3.5	2.15	1.75- 3.15
Direct	2.08	1.85- 2.4	1.36	0.8 - 1.95
Alk. phosphatase (K.A. unit)	41.10	33.25-50.3	44.40	30.0 -55.35
S.G.O.T. (I.U.)	49.33	38-52	40.67	15-44
S.G.P.T. (I.U.)	43.5	30-55	35.3	13-42
Thymol turbidity (Test Unit)	2.0	1.5- 3	1.5	1.5- 3
Urinary bile salt and bile pigment	+		+	
Serum protein (gm.%)	5.8	4.6- 7.6	5.9	5- 7.5

Liver Biopsy Report: Intact liver architecture with mild Kupffer cell proliferation. Normal caliber of bile canaliculi with occasional dilatation.

Treatment: The treatment was un-specific and consisted of confinement in bed with high carbohydrate diet, plenty of glucose drink, prophylactic antibiotic, vitamin C and iron. Steroid was not used in any of the cases.

(Friedlander and Osler, 1967).

Recurrence by no means is regarded as an indispensable criteria for the diagnosis (Iber, 1965; Ikonen 1964). Rosenlund (1966) summarized the incidence of different symptoms of this disorder from the literature. He reported the incidence of recurrence and premature delivery as 38% and 26% respectively. History of same disorder in previous preg-

nancy was obtained in 4 out of 12 multi-gravidae (33.3%) in the present series. Only 1 baby died of prematurity. However, overall prognosis for the mothers and babies were excellent. Most of the workers expressed the same view regarding maternal and foetal outcome (Iber, 1965; Rosenlund, 1966; Karna, 1966).

Laboratory studies from our patients and biopsy from liver in 2 cases were consistent with the picture of intrahepatic cholestasis. The values obtained for direct bilirubin, pointed strongly to the possibility that hyperbilirubinaemia in the case of cholestatic jaundice in pregnancy was caused mainly by this component.

It may be recalled that there was definite history of using oral pills in 4 patients in some part of their reproductive life. Since progestational hormones and progestins interfere with excretion process of liver (Schaffner *et al*, 1960; Villee and Villee 1963) it is felt that use of oral contraceptives might be having

some aggravating cholestatic effect on pregnancy liver where mild cholestasis is a normal response to hormones of pregnancy. Careful search may bring out the co-relation in future.

Acknowledgement

The authors are thankful to Dr. N. L. Pramanick, F.R.C.S., Medical Superintendent, Safdarjang Hospital, New Delhi, for permitting us to publish this paper.

References

1. Friedlander, P. and Osler, M.: *Am. J. Obstet. & Gynec.* 97: 894, 1967.
2. Iber, F. L.: *Am. J. Obstet. & Gynec.* 91: 721, 1965.
3. Ikonen, E.: *Acta Obstet. & Gynec. Scand.* 43: Suppl. 5, 1964.
4. Karna, M.: *J. Obstet. & Gynec. India.* 16: 99, 1966.
5. Rosenlung, M. L.: *Obstet. & Gynec. Survey.* 21: 699, 1966.
6. Schaffner, F., Popper, H., Perez, V.: *J. Lab. and Clin. Med.* 56: 428, 1960.
7. Villee, C. A. and Villee, D. B.: *Ann. Rev. Physiol.* 25: 287, 1963.

(The following table contains faint, illegible text, likely bleed-through from the reverse side of the page.)