

## NEONATAL JAUNDICE

### Case of Pyrexia and Jaundice in Premature Infant

#### Case Report

Presented by Doctor Yeoh Joo Seang.  
Regd. No. 5651. Born on 27th March 1956 (1st twin). Birth Weight: 3 pounds 15 ounces. Chinese.

**OBSTETRIC HISTORY:** Primigravida — aged 17-32 weeks gestation.

She was delivered of twins on 27th March 1956; total labour lasting for 19 hours 55 minutes.

1st twin — Vertex L.O.A. — weight: 3 pounds 15 ounces.

2nd twin — Breech R.S.A. — weight: 3 pounds 12 ounces.

She was discharged in good condition on 29th April, 1956.

**PROGRESS OF 1ST TWIN:** Routine premature nursing care was given.

Feeding: E.B.M. for the first 3 days followed by modified Lactogen.

#### INVESTIGATION & TREATMENT:

4th day: An umbilical cord infection was treated with spirit and penicillin—sulphonamide powder.

6th day: The infant was very jaundiced. T.R. 5.02 m. Hb. 105%.  
Urine—bile nil, Urobilin nil.  
Urobilinogen nil.

The jaundice gradually decreased but an icteric tinge of the skin persisted until discharge.

12th day: The temperature was 100.4°F. and no cause was found. Inj. Penicillin 20,000 units b.d. for 5 days was given. A pyrexia of 99°F. continued for 3 days and rose to 100°F. during the following week. The stools were frequent but formed. Throat swab cultured *N. Catarrhalis* and few *Staphylococcus Albus*.  
*Sensitivity*—Penicillin +

Streptomycin +  
Chloromycetin +++  
Terramycin +++  
Achromycin +++  
Aureomycin ++

Oral streptomycin 0.5 gm. daily, was given in divided doses for 3 days.

Inj. Penicillin 20,000 units 6 hourly for 5 days was given.

Urine: Alb. +, Few Pc., Ec. 5-6, M.O. + E.C. Few. The baby was feeding slowly but gained weight to 4 pound 2 ounces on 32nd day.

34th day: *X'ray chest:* "Increased broncho-vascular markings."

The clinical condition was poor. The baby was an ashen colour and the temperature 101°F. Crepitations were heard at base of Right lung. Mucus was aspirated. Nasal oxygen and Inj. Nikethamide ½ c.c. was given. The spleen was palpable.

39th day: An irregular pyrexia persisted until discharge. The abdomen remained distended  
A second course of Inj. Streptomycin 40 mgm. b.d. and Inj. Penicillin 20,000 units 6 hourly for 4 days was given.

44th day: The abdomen was less distended and the general condition improved gradually until discharge.

Hb. was 71% and T.W. 10,800 and the urine showed Alb. +, Pc. 8-10, Ec. 3-4, Rbc. 2-3.

Granular casts were present. A course of aureomycin 50 mgm. 6 hourly for 4 days was given. The blood urea was 22 mgm.% and serum bilirubin 4.8 mgm.%.

Prior to discharge the Hb. was 64% and T.R. 3.3 m. T. W. 9,000, P 55 L 40 M 3 E. 2%. Reticulocyte count 0.8%.

63rd day: The infant was discharged, aged 63 days, weighing 5 pounds 3¼ ounces.

## Two Cases of Haemolytic Disease:

### (a) Rh. INCOMPATIBILITY

#### (a) Rh. INCOMPATIBILITY:

Father—British—Blood Group "A."  
Rh. positive  
Mother—British—Blood Group "A."  
Rh. negative. (cd/cd)

OBSTETRICAL HISTORY: Mother aged 30  
Gravida 2.

1st pregnancy: Twins delivered in 1952  
in England.

Nothing abnormal noticed at birth. Both babies living and well.

2nd pregnancy: Booked case (Doctor  
Wilson T. Roddie) L.M.P.  
1st September 1955,  
E.D.D. 8th June 1956  
At 36 weeks pregnancy  
anti-D antibodies were  
present to a titre of 1:  
16 (w).

On 20th June 1956 at  
5.00 p.m. when maturity  
was 37 weeks 3 days, the  
patient went into labour,  
and a female baby  
weighing 6 pounds was  
normally delivered. The  
baby's general condition  
was good and the colour  
normal.

#### BABY'S CORD BLOOD TAKEN AFTER

BIRTH: Blood Group "A," Rh. positive.  
Coomb's (Direct) positive. Hb. 112%.

Serum bilirubin 6 mgm. %.

When the infant was 20 hours an exchange blood transfusion was performed by Doctor Smith because the baby was slightly jaundiced 650 c.c. of

### (b) ABO INCOMPATIBILITY

fresh Rh. negative blood was transfused into the baby, and 590 c.c. of baby's blood removed.

Hb. before transfusion—65%.

Serum bilirubin—8 mgm.

An antibiotic cover of Penicillin 50,000 units I/M. 6 hourly and Streptomycin—60 mgm. b.d. was given. Vitamin K.

—5 mgm. IMI. stat.

Hb. after transfusion 95%.

*Progress Notes:* The baby progressed well remaining afebrile and feeding well. Mother and baby were discharged well on 28th May 1956 when the infant's Hb. was 100%.

#### (b) ABO INCOMPATIBILITY:

Mother—Chinese 41 years—Gravida 3.

1st two babies were delivered in China, 9 and 7 years ago, and the mother did not know whether these babies had been jaundiced.

PRESENT PREGNANCY: On 9th May 1956 when maturity was 39 weeks labour started and a male baby, 5 pounds 13 ounces was delivered by Kielland's forceps. Indications being:

1. Deep transverse arrest. Vertex R.O.P.—R.O.T.
2. Foetal distress.
3. Prolonged second stage.

After delivery the condition of both mother and baby was satisfactory.

On the second day of life the baby was noticed to be jaundiced. There was no temperature. The spleen and liver were not palpable. Hb. 102%. T.R. 5.18 m.

PROGRESS NOTES:	15th May —	Hb. 84%	T.R. 4.25 m.	Ret. 1.5%
	18th „ —	80%	3.86 m.	
	21st „ —	81%	4.21 m.	
	23rd „ —	75%	3.97 m.	
	24th „ —	76%	3.94 m.	
	25th „ —	73%	3.76 m.	
	27th „ —	75%	3.80 m.	
	28th „ —	79%	—	

Urine—15th May 1956 for bile  
urobillinogen—negative  
18th May 1956 for bile  
urobillinogen—negative.

Father—Group "A" Rh + ve

Mother—Group "O" Rh + ve — K.T.  
negative.

Anti—A. agglutinins present.  
Titre 1: 64.

Baby—Group "A" Rh + ve.  
Coomb's Direct negative.  
Indirect negative.  
Serum bilirubin— 12 mgm.%.  

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The baby was breast fed and gained  
weight to 6 pound 1¼ ounces. The jaun-

dice gradually faded and the patient was  
discharged on 28th May 1956.

### Discussion

Doctor Scott discussed the problem of  
haemolytic disease in Singapore. She  
emphasized the necessity for ante-natal  
care and the value of serial antibody titre  
estimations.

Doctor Smith stressed the importance  
of taking cord blood immediately after  
birth for estimation of Hb. serum billru-  
bin, grouping and Coomb's test in any  
infant where the previous obstetrical  
history was suggestive of haemolytic  
disease or where the mother was known  
to be Rh. — ve.