CLINICAL MEETING

22.03.18

CASE PRESENTATION

BY

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DEPT OF PEDIATRICS

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Case History

- Name: Baby S Informant: Mother
- Age: 8 month
- Male
- R/o Nadimithanda.
- came to the hospital on 27.7.2017 with
  - **Chief complaints** of
    - **cough for 4 days**
    - **fever for 3 days**

History of present illness

- Child was apparently asymptomatic 4 days prior to admission in hospital, then he developed
- cough - 4 days, insidious onset, gradually increasing, not associated with sputum, no diurnal variation or positional variation
- fever- 2 days, sudden in onset, high grade, intermittent, not associated with chills and rigors .
- h/o decreased intake of feeds since 2 days
- c/o dull activity

History of present illness…….

- No h/o breathlessness
- No h/o earache
- No h/o pain in upper abdomen
- No h/o constipation / diarrhea / malena
- No h/o passage of worms in stools
- No h/o dark colored urine, or decreased urine output

Past history

- No h/o jaundice
- No h/o contact with tuberculosis
- No h/o previous blood transfusions

Treatment history

- Child was treated with oral antibiotics by a doctor outside for 2 days, but was not relieved

Birth history:

- **Obstetric history:**
  - Mother's Age 26 yrs, G1 P1
  - Order of birth : 1st baby
  - Full term, LSCS (indication -inadequate labour pains)

- **Natal history**
  - Baby cried immediately after birth
  - No h/o birth asphyxia
  - Birth weight = 3.1 kgs

Neonatal period:

- No h/o prolonged jaundice or any other problem
- Exclusively breastfed

Immunization history:

- Vaccinated regularly as per National immunization schedule
- BCG scar present on the left deltoid region

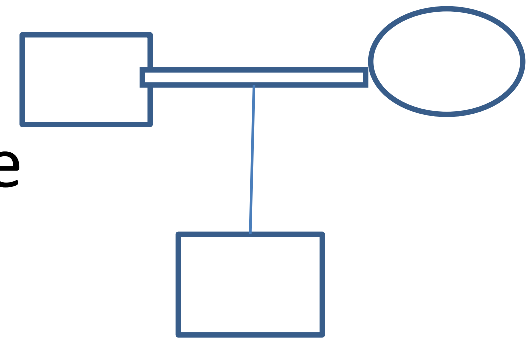
Developmental history:

- Attained normal milestones as per age

Drug history

- Not on any other medication.

Family history



- 2nd degree consanguineous marriage
- No similar complaints in family

Socio economic status

- Lower middle class (modified Kuppuswamy classification)

GENERAL EXAMINATION:

- Child is dull, inactive,
- No dysmorphic features
- **Pallor** – present. Severe pallor
- **No** icterus, clubbing, cyanosis, lymphadenopathy, edema

Vitals:

- Temp = 99 F
- RR = 48/min
- SpO2 = 98% at room air
- PR- 126 bpm, regular, rhythmic normal volume.

Anthropometry

- Weight : 6.5 kgs (< 3rd percentile)
- Height : 69 cm (< 3rd percentile)
- Head circumference : 43 cm (< 50th percentile)

RESPIRATORY SYSTEM Exam

INSPECTION:

- Shape of the chest-normal.
- Both sides are moving equally with respiration.
- Trachea is central in position.
- Bilateral subcostal retractions +.

PALPATION :

- inspectory findings confirmed

AUSCULTATION :

- B/L air entry present, equal on both sides
- NVBS , B/L crepitations present

PER ABDOMEN EXAMINATION

INSPECTION :

- Shape of the abdomen-Normal.
- All quadrants are moving equally with respiration.
- No visible peristalsis.
- Umbilicus central in position.

PALPATION:

- Soft, Liver is palpable 3cms below the right costal margin, soft in consistency , smooth in surface , non tender, liver span 8cm .
- Spleen is palpable 3cms below left coastal margin and above the umbilicus, soft in consistency

Other systems

- **CVS EXAMINATION** :
  - No Precordial bulge/Pulsations.
  - Apical impulse-Left 4th ICS 1cm Medial to MCL.
  - S1 S2 normal.
- **CNS EXAMINATION:** Normal

PROVISIONAL DIAGNOSIS

- Anemia with hepato-splenomegaly and lower respiratory tract infection
- Cause of anemia:
    - ?Hemolytic anemia

Investigations done at admission

Hb- 4.0 gm%

TLC- 14,000 /mm

Plt count: 2.6 lakhs/cumm

Neutrophils = 40%

Lymphocytes = 55%

Eosinophils = 02%

monocytes 02 %

Basophils 0%

Reticulocyte count = 3%

PCV = 13.8%

MCV = 63.7 FL

MCH = 26.3 PG

MCHC = 33.4 %

RDW-CV = 25.3%

RDW-SD = 56.0 FL

RBC count = 2.01 M

Investigations…

- **Peripheral smear exam:**

- microcytic, hypochromic anemia, RBC predominantly with few tear drop cells, occasional target cells, marked aniso-poiklocytosis noted. occasional nucleated RBC
- WBC: appears normal
- Platelets : adequate

- Suggestive of hemolytic anemia - thalessemia

Investigations…..

- Sickling test: –ve
- Osmotic fragility: -ve
- Blood group : A +ve

Other investigations

- Renal Parameters – Bl. Urea 28mg/dl , serum Creatinine 0.4mg/dl
- LFT – TSB -1.65mg/dl ,SGOT 74 IU/L , SGPT 28 IU/L
- CUE : normal
- **USG abdomen :** Liver : 9.5 cm normal echo texture,

  Spleen : 8.1cm

Investigations….

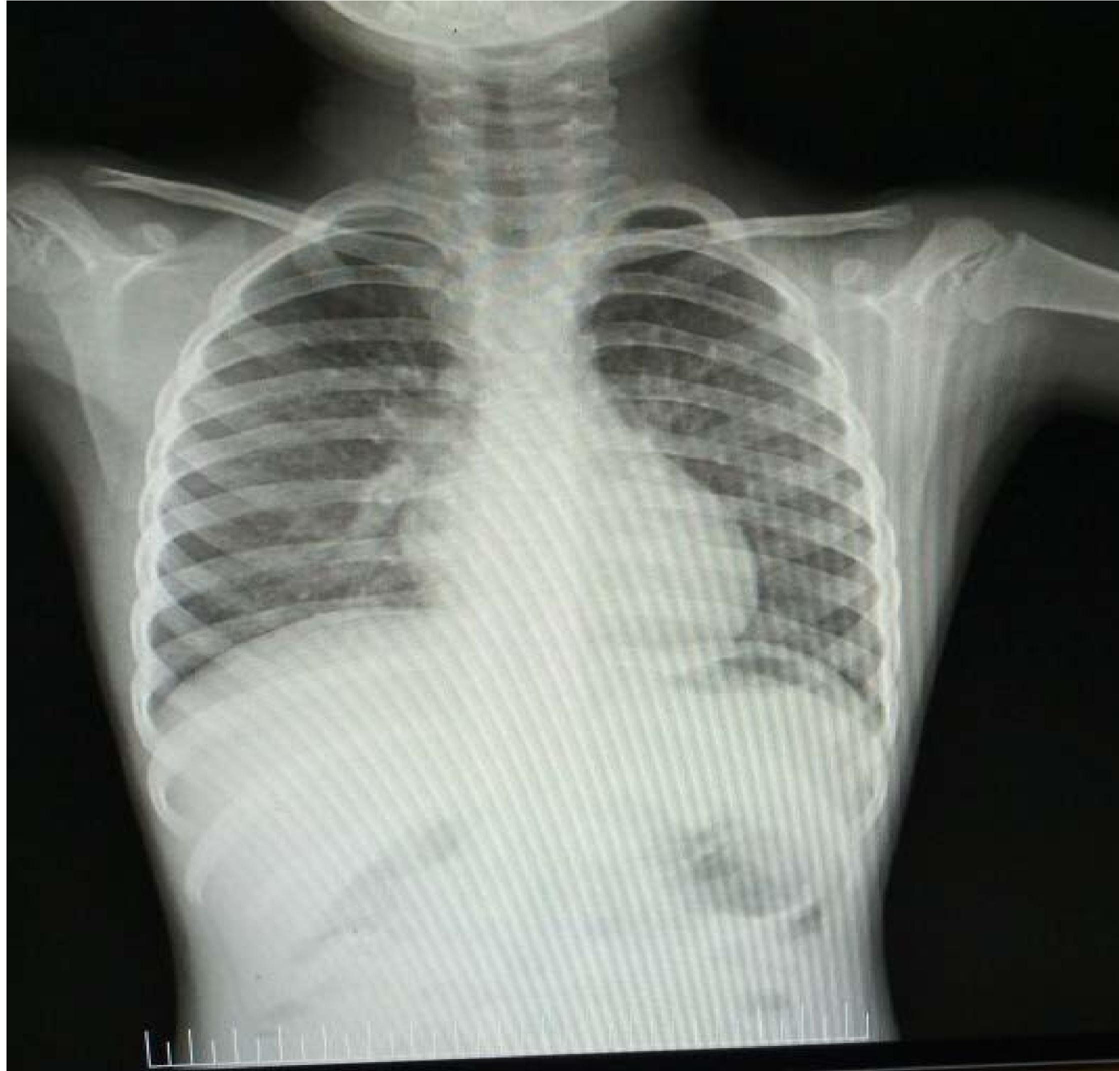
- Smear for Malaria Parasite: Negative
- Malaria Strip Test: Negative
- **Serology :**

  HIV-Non reactive

  HbsAg-Negative

  HCV-Negative

X Ray Chest



- **Hb electrophoresis:**
  - HbF = 89.4%   (normal for age = < 2.5%)
  - HbA2 = 3.6%   (normal for age = <3.5%)
  - HbA = 7%   (normal for age = >95%)

  - Confirms the diagnosis of Thalessemia major

Treatment in hospital

Day 1 to 6

- Allowed orally
- O2 inhalation @ 4 lit/min with face mask for one day.
- Inj. Amoxyclav (100mg/kg/day)
- Syrup Paracetamol 15mg/kg/dose PO/SOS
- Mucolite drops 1ml /PO/TID

- On 2nd day : Blood transfusion : PRBC given. 10ml/kg

Investigations on day 3 of hospitalization

Post transfusion:

Hb: 8.2 gm%

TLC : 16,500 cells/mm3

DC : N 30 L 62 E 4 M 4 B 0

PC: 2.8 L/mm3

Bl Urea-21.6 mg/dl

Sr.creatinine:0.93 mg/dl

Na-145,mmol/l

K+:3.5mol/l

Cl:111mmol/l

P:4.6mg/dl

Uric acid-5.3mg/dl

Calcium-9.6mg/dl

GA for AFB: No AFB seen

Mantoux test: negative

On day 6

- Child was afebrile, no cough, no respiratory distress, no chest indrawing, feeding well and no other symptoms

- Child was discharged from hospital

2nd Admission in hospital

- child was readmitted on 15/9/17(1 month after previous discharge)
- admitted for high fever and respiratory tract infection
- Investigation showed Hb – 5.3 gm%
- Received treatment for Respiratory tract infection
- one PRBC transfusion (10ml/kg) was given
- discharged after 10 days

3rd admission in hospital

- Child readmitted on 24/12/17(2 months after the last admission) in hospital for blood transfusion,
- Came for regular follwup
- HB- 3.5 gm%
- Given PRBC transfusion as 10ml/kg and discharged

Summary of the case

- 8 month old male.
- Presented with fever and cough, chest indrawing
- **On examination:** severe pallor, PEM Gr 1

  RS exam - subcostal retractions, b/l crepitations

  hepato-spleenomegaly
- **Investigations** : Hb - 4 gm%, Peripheral smear exam suggestive of Hemolytic anemia
- **HB Electrophorosis:** indicating THALASSEMIA MAJOR
- Received 3 PRBC transfusions in a period of 5 months

Diagnosis

- Thalassemia major with PEM Grade 1 with repeated respiratory tract infection

Thank you..