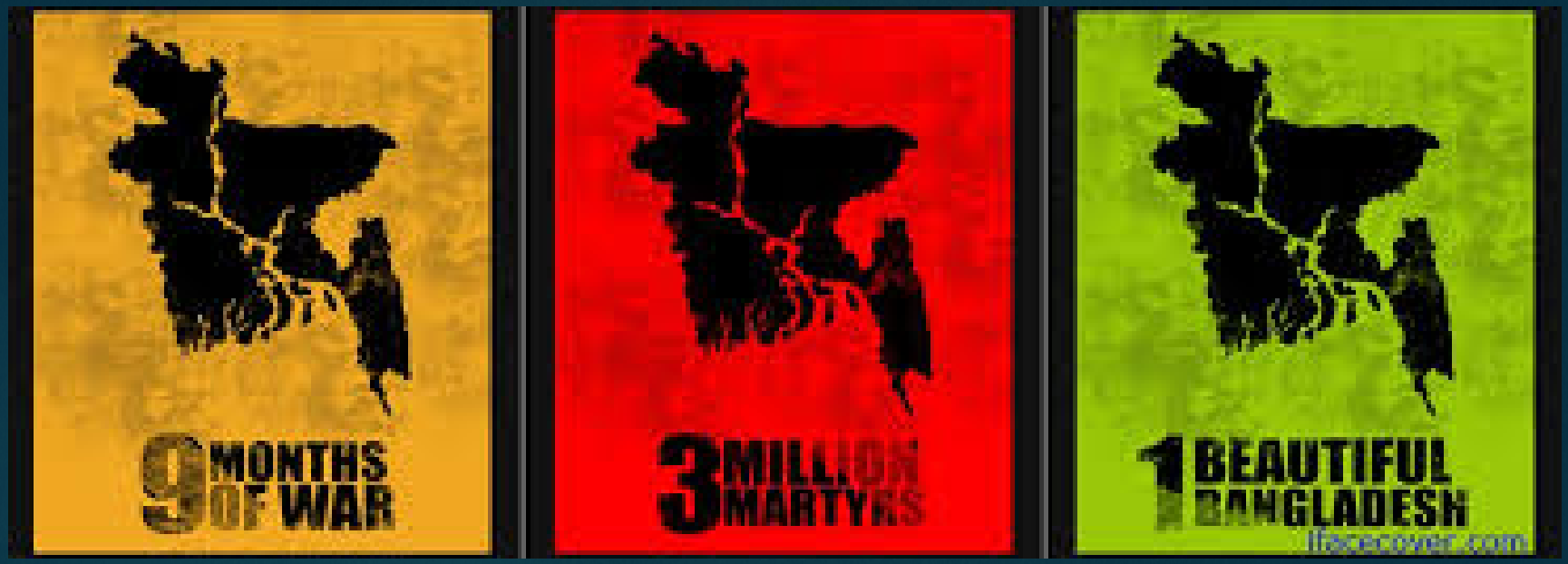
The 17th International Congress & Scientific Seminar of Bangladesh Society of Medicine, 2016


9 MONTHS OF WAR
3 MILLION MARTYRS
1 BEAUTIFUL BANGLADESH
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A 19-Year-Old Man With Flaccid Quadriplegia

PRESENTED BY

DR. SUSMITA PAUL

RESIDENT

MD (ENDOCRINOLOGY)

BSMMU

Particulars of the patient

- Name : X
- Age : 19 years
- Gender : Male
- Address : Jessore
- Occupation : Student

Chief complaint

- Weakness of all four limbs- 1 month

History of presenting illness

Weakness :

- Subacute in onset
- Gradually progressive
- Lower limb followed by upper limb
- With tingling and numbness of hand and feet
- Bed bound within a month

No

- Bowel and bladder involvement
- Diurnal variation
- Dysphagia, dysarthria, diplopia
- Breathing difficulties
- Fever, skin rash, joint pain, oral ulcer

Background history

Acute severe diarrhea and vomiting

- About 1 month prior to the onset of this weakness
- Initially treated at Thana Health Complex
- Referred to Jessore Medical College Hospital
- Treated with inj. Ciprofloxacin and Metronidazole
- Recovery within 2-3 days

Background History....

After one week of discharge,

- Jaundice
- Generalized swelling
- Altered consciousness
- Generalized convulsions 2 times

Previous investigations showed

Investigation	Results
CBC	Hb-7 gm/dl, ESR-36 mm TC-3800/cumm (normal differential) TPC-1,50,000/cumm
PBF	RBC- normocytic normochromic WBC-normal Platelet- normal

Previous Investigations….

Investigation	Result	Normal range
S. Bilirubin	176.6 micromol/L	<26 micromol/L
S. ALT	160 U/L	<35 U/L
S. Alkaline phosphatase	103 U/L	35-100 U/L
PT	19 sec	<12 sec
S. Albumin	37 g/L	35-50 g/L

Previous Investigations….

Investigation	Result	Normal range
S. Electrolyte	Na-126 mmol/L K-3.2 mmol/L Cl-99 mmol/L	135-145 mmol/L 3.4-4.7 mmol/L 96-106 mmol/L
S. Creatinine	159.1 micromol/L	70-120 micromol/L
Urine R/E	Pus cell: 0-2/HPF RBC: Nil Protein: Nil	Pus cell: 0-2/HPF RBC: 0-2/HPF Protein: Nil
RBS	5.3 mmol/L	<6.9 mmol/L
Anti-HAV	Negative	
HBsAg	Negative	

Previous Investigations….

Investigation	Results
Chest X-ray	Bilateral mild pleural effusion
USG of whole abdomen	Mild hepatomegaly Moderate ascites

Background history….

- Labelled as a case of Acute Fulminant Hepatic failure
- Conservative treatment given

Background history….

- Became fully conscious after 10 days
- Jaundice and swelling subsided gradually

Background history….

- Weakness after 1 month of onset of illness
- Admitted into BSMMU about 2 months after his initial presentation
- No further episode of convulsion

Important negative history

- Past history of
  - Same type of weakness
  - Jaundice
- Alcohol or IV drug abuse
- Family history of
  - Similar illness
  - Consanguineous marriage

Examination findings

- **General examination**
  - Mildly anemic
  - Pigmentation on lower limbs
  - Vital signs: Pulse-84/min,
    BP-110/75mmHg
    Respiratory rate-16/min
    Temperature- 98.4 F

General examination….

No

- Jaundice
- Edema
- Skin rash
- Clubbing, Leukonychia, Koilonychia
- Lymphadenopathy
- Peripheral signs of CLD

Neurological examination

- Higher psychic function
- Speech
- Cranial nerves
- Fundus

Normal

Neurological examination….

- Distal muscle wasting with bilateral wrist and foot drop
- Muscle power: MRC grade1 distally
  MRC grade2 proximally
- All deep tendon reflexes: absent
- Planter response: absent
- Sensory deficit in glove and stocking pattern

Examination of Abdomen

- No organomegaly
- No ascites

Examination of other systems

- No abnormal finding

Differentials

Investigations

Investigations

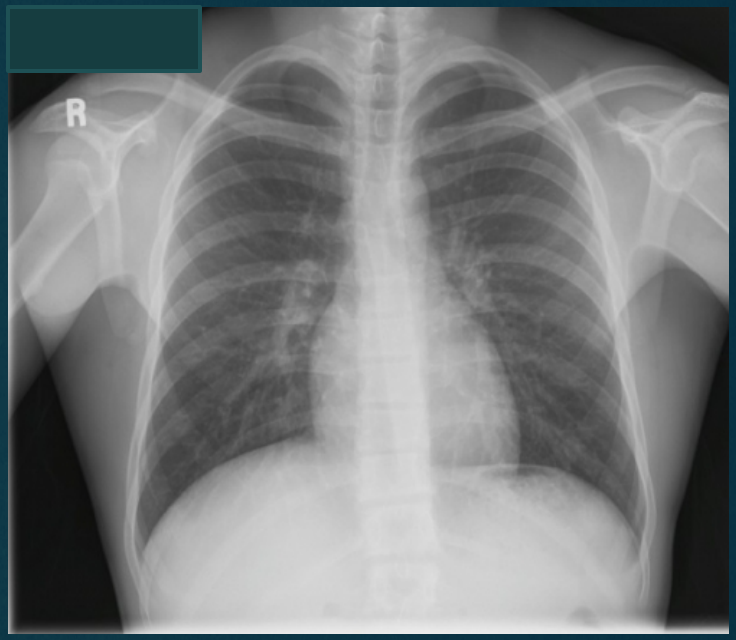
Investigation	Result
CBC	Hb-10.5 gm/dl, ESR-27 mm TC-8,700/cumm (normal differentials) TPC-2,65,000/cumm
PBF	RBC- normocytic normochromic WBC-normal Platelet- normal

Investigations….

Investigation	Result	Normal range
S. Bilirubin	7 micromol/L	<26 micomol/L
S. ALT	31 U/L	<35 U/L
S. Creatinine	97 micromol/L	90-120 micromol/L
Urine R/E	Normal	
FBS	5.1 mmol/L	<5.6 mmol/L
2 hrs ABF	6.3 mmol/L	<7.8 mmol/L
S. Electrolyte	Na-137mmol/L K-3.9 mmol/L Cl-98 mmol/L	135-145 mmol/L 3.4-4.7 mmol/L 96-106 mmol/L

Investigations….

Investigation	Result
X-ray chest	Normal
Ultrasound scan of abdomen	Normal



Investigations….

Investigation	Result
ANA	Negative
C-ANCA	Negative
P-ANCA	Negative
S. TSH	2.7 mIU/L (Normal: .4-4.2)
S. Vit B12 assay	263 pg/ml (Normal: 230-670)

Investigations….

Investigation	Result
CSF study	Cell: 4/cumm, lymphocytes Protien: 36mg/dl Sugar: 84 mg/dl
Nerve conduction study	Mixed sensorimotor demyelinating and axonal polyneuropathy

Diagnosis

- Few hours before onset of GI symptoms, he took some ‘pitha’
- The ‘pitha’ provided by someone who had rivalry with his family

Criminal intoxication

?

Further investigation

- Hair sample analysis for Arsenic level : 19.3 mg/kg (normal level <3 mg/kg)

Diagnosis

- Acute Arsenic Poisoning

Treatment given

Dimercaprol (3 mg/kg) I/M

- 4 hourly at day 1, 2
- 6 hourly at day 3
- 12 hourly – next 10 days

Follow up

- After 3 months : could walk with aid
- After 12 months : wrist and foot drop resolved partially, could perform daily activities without help

Acknowledgement

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Thank You