Clinicopathological Correlation ISNSCCON 2018

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Discussant: Dr. Dilip Rangarajan

A 65-year-old lady presented with complaints of generalized weakness and low back ache for

6 months. She also had history of nausea, vomiting and loss of appetite for the last2 weeks.

There was no history of decreased urine output, breathing difficulty, weight loss, hair loss,

oral ulcers, bone and joint pains, rash and haematuria. There was no history of graveluria,

polyuria and nocturia. She had history of tingling, numbness and paraesthesia for past 2

months duration.

Patient gave a history of fracture of right tibia after she had an injury to her right leg while

getting down from a car three months ago and for this an open reduction and internal fixation

was done on the affected fracture leg.

There was no history of use of NSAIDs or any indigenous medicine intake. She was neither a

diabetic nor a hypertensive. For similar complaints patients was evaluated at different facility,

two days prior to consulting the present institute. The serum creatinine was of 3.2 mg/dL.

Repeat serum creatinine at present institute was 6.8mg/dL.

On examination she was anaemic, ill nourished, body weight of 56 kg and height of 162 cm.

There was no pedal oedema, jaundice, clubbing or lymphadenopathy. There were sunken

eyes. Pulse was 114 bpm, feeble, regular, all peripheral pulses felt equally, no radiofemoral

delay and blood pressure was 100/70 mmHg both supine and standing.

Cardiovascular system examination: Jugular venous pressure raised with prominent y

descent. Apex beat is in 5th left intercostal space, hyperdynamic, on mid-clavicular line,

normal cardiac resonance, normal first and second heart sounds. A left ventricular fourth

sound present. No murmurs heard.

Gastrointestinal system examination: Oral cavity and pharynx: no abnormality; abdomen: all

areas were moving equally with respiration, soft, no tenderness. Liver was palpable, 3 cm

below right costal margin, soft, non-tender. Spleen palpable, 2 cm below left costal margin, soft, non-tender.

<u>Nervous system:</u> Conscious and coherent. All mental functions, cranial nerves and motor system normal. Sensory system examination showed decrease pain and temperature sensation and loss of vibration sense. There were no cerebellar signs or signs of meningitis. Gait was normal. Skull and spine were normal.

Respiratory system examination: unremarkable

Her renal functions deteriorated further and she was initiated on hemodialysis and a renal biopsy was performed.

Table Laboratory Investigations

Investigation	Result	Range
Haemoglobin (g/dL)	6.9 Peripheral smear: Normocytic normochromic No schistocytes Roleaux formation	13-17
Total leucocyte count (cells/cu mm)	14710	4000-11000
Platelet count (lakhs/cumm	1.04	1.5 to 4.1
ESR (mm after first hour)	110	0-15
Prothrombin time (seconds)	14.6	11-16
INR	1.12	
APTT(patient/ control) (seconds)	26.1/29.30	26-40
RBS (mg/dL)	84	< 200
Serum creatinine (mg/dL)	7.8	0.52 – 1.04
Blood urea (mg/dL)	162	15 – 36

Serum potassium (mEq/L) 5.4 3.5 - 5.1			
Serum calcium (mg/dL) 7.9 8.4 - 10.2	Serum potassium (mEq/L)	5.4	3.5 – 5.1
Serum phosphorus (mg/dL) 6.0 2.5 - 4.5	Serum sodium (mEq/L)	134	137 – 145
Serum uric acid (mg/dL) 7.7 2.5 - 6.2	Serum calcium (mg/dL)	7.9	8.4 – 10.2
Serum parathyroid hormone (pg/mL) 281 14-65	Serum phosphorus (mg/dL)	6.0	2.5 – 4.5
Serum Vitamin D 3 levels (ng/mL)	Serum uric acid (mg/dL)	7.7	2.5 – 6.2
Bilirubin (mg/dL)	Serum parathyroid hormone (pg/mL)	281	14-65
Total Conjugated 0.87	Serum Vitamin D 3 levels (ng/mL)	40.60	6-20
Serum alkaline phosphatase (IU/L) 178 38 – 126	Total	0.87	0.2 – 1.3
Aspartate aminotransferase (AST) (IU/L) Alanine aminotransferase(ALT) (IU/L) Total protein (g/dL) 7.6 6.3 – 8.5 Albumin 3.5 – 5.1 Globulin 2.4 2.3 – 3.5 5.1 LDH (IU/L) 2640 120-260 Radiology Chest radiograph: Normal Healed fracture of lower 1/3 rd tibia No lytic lesions in skeletal survey US abdomen RK 11.2 cm LK 11.6 cm Increased echoes No obstruction Bladder: normal Urine culture Sterile Complete urine examination		0.3	0 - 0.3
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Urine culture Sterile Complete urine examination		RK 11.2 cm LK 11.6 cm Increased echoes No obstruction	
	Urine culture		
pH 6.5 4.7 – 5.5	Complete urine examination		
	рН	6.5	4.7 – 5.5

Albumin	Nil	Nil
Sugars	Nil	Nil
Pus cells/hpf	2-4	0-5/hpf
RBCs/hpf	2-4	0-2/hpf
Casts/hpf	Granular/Hyaline casts present	
24hour urine protein	6460 mg/24 hour	
HbsAg/HIV/AntiHCVAb	Negative	
ANA	Negative	
Rhematoid factor	Negative	
CANCA/ PANCA/ Anti GBM antibody	Negative	
C3 (mg/L)	1120	970-1576
C4 (mg/L)	580	162-445