From: "ROOT" <root@sctimst.ac.in>
To: "ROOT" <root@sctimst.ac.in>
Date: 22/10/2024 01:25 PM
Subject: CPC Clinical Protocol 23.10.2024

Dear All,
Season's Greetings.
The next Wednesday CPC of the session will be held on **October 23, 2024** at 08.00 hours (IST) in **Lecture Theatre 1**, Nehru Hospital, PGIMER, Chandigarh.

The session will also be available on the Webex platform. Kindly follow the link below to join.
https://telemedicine.webex.com/telemedicine/j.php?MTID=mb8f5c93d0efe86e2ec7df721b3c21227

In case you join in thru WebEx, kindly **ensure that your microphone and camera are switched off** and **PLEASE DO NOT SHARE YOUR SCREEN**.

The Clinical handout of the case to be discussed is attached herewith.
The clinical protocol will be discussed by ***Dr. Shankar Naidu, Department of Internal Medicine.*** Radiology will be discussed by ***Dr. Ujjwal Gorsi.*** Autopsy pathology will be presented by ***Dr. Amanjit Bal.***

Yours sincerely,

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Regional Resource Centre, North
Department of Telemedicine
PGIMER, Chandigarh

Staff CPC (23/10/2024)- Clinical Protocol

Name: **Mr. S**	Age/Sex: **28yr / Male**	Clinician in-charge: **Prof. HS Kohli**
Residence: **Solan, HP**	CR. No: **201705596221**	Clinical discussant: **Dr. Shankar Naidu**
Ward: **MMW**	Ad. No: **2023056749**	Radiology discussant: **Dr. Ujjwal Gorsi**
DOA: **18-07-2023**	DOD: **29-07-2023**	Pathology discussant: **Prof. Amanjit Bal**

Chief Complaints: Oral ulcers, gum bleed and fever x 10 days

Background History: Oct. 2016: Gum bleed, epistaxis. Evaluated in **Oct. 2017** (IGMC & PGI): Hb: 4.5/ TLC: 14,200/ platelets: 12000/ ANA: 30 IU/ml/ anti-ds-DNA: Negative. Diagnosed as ITP, started on oral prednisolone (60mg/d), 2 units PRBC transfusion. 2 weeks later: Hb: 8.5/ platelets: 1.93 lac. Oral steroids tapered. **June 2018**: Hb: 14.1 / platelets: 3.97 lac and steroids were stopped.

Nov. 2019: Bilateral hip pain for 15 days with difficulty in walking. No bleeding manifestations. MRI pelvis +hips s/o bilateral hip avascular necrosis. **Jan. 2020**: Admitted under Orthopedics, Platelets: 48000, improved to 1.29 lac with oral prednisolone (60mg/d). Underwent right THR on 2/2/2020 and discharged on 7/2/2020. Subsequent follow up details not available.

History of presenting illness: Fever for last 10 days, up to 102°F, 3-4 spikes/day and relieved with antipyretics. Multiple oral ulcers, painful, causing difficulty in eating for 10 days. A/w bleed from ulcer site and spontaneous gum bleeds. H/o photosensitivity with rash over malar area. H/o joints pain, morning stiffness involving bilateral wrists, shoulders, and knees. H/o loose stools for 10 days, a/w ?melena but no h/o pain abdomen, hematemesis, constipation. No h/o alopecia. No h/o chest pain, breathlessness, syncope, decreased urine output, frothuria, hematuria, altered mental status, seizures, or psychiatric symptoms.

Past history: Not a known hypertensive, diabetic, no h/o CAD, CVA, tuberculosis.

Family history: 5th in order out of 7 siblings. Has 3 children. No h/o similar illness in other family members. No h/o hypertension, diabetes, CAD, CVA, tuberculosis in other family members.

Personal history: Mixed diet. No h/o smoking, alcohol, or other substance use.

General Examination: Conscious, cooperative, oriented. PR: 116/min; BP: 116/76 mmHg; RR: 16/min; SpO2: 96% @RA. Pallor present, no icterus, cyanosis, clubbing, lymphadenopathy, pedal edema. Alopecia & Malar rash with nasolabial sparing+. Oral cavity: bleeding from gums and thrush. **Abdomen**: Soft, non-tender, no organomegaly, no free fluid, bowel sounds- present. **Respi.**: B/L NVBS heard, no added sounds. **CVS**: S1, S2 heard, normal. S3 present, No murmurs. **Neuro**: Conscious, oriented, E4V5M6, no focal deficits.

Investigations:

	18/7/23	20/7/23	22/7	23/7	24/7	25/7	26/7	27/7	28/7
Hb (gm%)	7.2	7.7	6.4	6.8	8.7	8.4	9.8	7.6	7
TLC	2800	1840	1700	1300	1030	1390	7290	7800	8250
DLC	N-83 L-10	N-78 L-14	N-74 L-16	N-77 L-15			N-79, L-8 M-12.9	N-83 L-8.5	
MCV/RDW	86.9 / 14.1	91.7 / 14.6		85			89.7 / 17.7	86.3	
MCH/MCHC	27.9 / 32.1	29 / 31.8		27			28.9/ 32.2		
Platelets	15000	27000	29000	26000	34000	64000	180000	98000	72000
Retics					0.95%		1.72%		
ESR							12		
PT / aPTT	10.2 / 38.1					11.2/ 38.4			
Fib. /d-dimer						1.31 / 2609			
PBF	Microcytic, hypochromic RBC, Rouleau formation noted. Neutropenia. Platelets markedly reduced.								

Iron profile (25/7): Sr Iron: 122mcg/dl; TIBC: 140mcg/dl; % saturation: 87.6%; **Ferritin:** >2000ng/ml. **Haemolytic workup (25/7):** Plasma Hb: 62 mg%; Urine Hb: Nil; G6PD: Normal; Haptoglobin: <5.8 mg/dl; **Blood group:** B+. **BM aspiration & biopsy** (A-1994/23, Tx-1605/23, 25/7/23): mildly hypocellular marrow. **Vit B12:** >2000 pg/ml; **Folate:**7.76 ng/ml; **iPTH:** 135 pg/ml; **25(OH)D3:** 35.6 ng/ml; **T3**: 0.852 ng/ml; **T4:** 4.75 mcg/dl; **TSH:** 5.27 mcIU/ml.

	18/7/23	19/7/23	20/7/23	21/7/23	22/7	24/7	25/7	26/7	27/7	28/7
Na^+/K^+ / Cl^-	125 / 4.9 / 108	127 / 5.1 / 105		130/4.1	129 / 4.6	127 / 5.1	126 / 5.5	124 / 6.4	130/5.4	135 / 5.3 / 102
Urea / Cr	118 / 2.2	108 / 2.1	101 / 2.1	94 / 2.6	103 / 3.5	143 / 5.5	200 / 6.4	230 / 7.4	217 / 7.6	182 / 6.9
TB/CB	0.73/ 0.31	0.62/ 0.57	0.82/ 0.74	0.86/ 0.85	1.13/ 0.75	0.89/ 0.66	1.11/ 1.09	1.08/ 1.04	1.16/ 1.15	1.1 / 1.06
AST/ALT	225 / 108	237 / 105	296/ 123	292 / 129	342 / 134	287 / 106	307/ 106	285 / 98	204 / 49	126 / 15
ALP		400	423	420		659	612	580	507	386
T.Pro/ Alb.	5 / 2.1	4.8 / 2.3	4.9/ 2.4	4.5 / 2.0	4.6 / 1.9	4.3 / 1.8	4.3 / 1.9	4.9 / 2.4	5.2 / 2.5	5.4 / 2.4
Ca^{2+}/ PO_4^{3-}		6.6 /3.8	6.4 / 3.5	6.6 / 3.2				5.1 / 8.1	5.6 / 6.6	7.2 / 5.9
$cCa2^+$		8.0	7.7	8.2				6.4	6.8	8.5
UA		7.8	7.8					12.3		11.4
LDH		490	506	489			612		669	718
CPK			61							231
CRP		16.01	14.46	14.42		6.96	4.07	3.74	27.37	147
TG/ TC/ LDL/ HDL		282 / 95/ 24/ 13				356 / 99 / 13 / 9				
C3 / C4		24.5 / 4.5				14.8 / 2.7	15.8 / 2.3			

	18/7/23	19/7/23	27/7	28/7
pH	7.306	7.373	7.065	7.15
pCO2	17.1	18.2	34.8	31.6
pO2	34.6	65.4	51	229
$HCO3^-$	11.3	13.9	9.7	10.8
iCa2+	0.74		0.88	0.76
Lactate			2.21	1.04

ANA (IIF): 3+ Nuclear, Homogenous
Anti-ds-DNA: >379 IU/ml
AIH panel: SMA 2+to 3+, AMA, LKM, PCA- negative
APLA w/u: LAC: Negative
aCLA: IgG- 319 U/ml, IgM- 103 U/ml
β2GP1: IgG- 1005 U/ml, IgM- 257 U/ml

Urine R/M (23/7): 3+ Albumin, 2+ blood. **Spot UPCR**: 3.12. **UPEP:** Band in albumin, **SPEP:** Normal. **Blood culture** (19/7/23): **Staph saprophyticus**; (24/7/23): **Staph. hemolyticus**, Sensitive to Vancomycin, Doxycycline; (31/7/23): **Staph. epidermidis**, Sensitive to vancomycin and doxycycline & **Stenotrophomonas maltophilia**, sensitive to Ceftazidime, levofloxacin, minocycline, cotrimoxazole. Urine culture (24/7/23): Sterile; HBsAg / Anti-HCV: Non-reactive; Anti-HBc (Total): Negative; Widal / IgM Leptospira / Malaria antigen / Scrub typhus IgM / Dengue IgM: Negative; **Procalcitonin:** (19/7): 2.04 ng/ml (25/7): 6.26 ng/ml.

ECG (18/7/23): Normal sinus rhythm, rate: 104/min, QTc: 371ms, No ST-T changes. **Echo (24/7/23)**: Normal LVEF, no RWMA, normal valves, no clot, vegetation, pericardial effusion. (27/7/23): EF grossly normal**. Pro-BNP** (24/7): 1637 pg/ml; **Trop T**: 25 pg/ml; **CK-MB**: 17.2 U/L.

USG Abdomen (18/7/23): Liver, spleen, pancreas kidneys: normal. Gall bladder: distended with wall thickness of 6.4mm, thin rim of perihepatic and pericholecystic fluid seen ?Acalculous cholecystitis.

CECT chest and Abdomen: Bilateral pleural effusion, ascites, few mediastinal and retroperitoneal lymphadenopathy (Largest: 1.7cm SAD), splenic infarct, ill-defined lesions in liver and spleen.

CXR (27/7): No cardiomegaly, bilateral perihilar infiltrates. **NCCT head (27/7):** No bleed/ infarct.

Course and management: Empirically started on Piperacillin +Tazobactam and Doxycycline in emergency and shifted to MMW on 21/7/2023. Received S/C Romiplostim 500 mcg on 22/7/2023. Started on IVMP (500mg/d x days) on 23/7/23 for active lupus and antibiotics were changed to Imipenem + Cilastatin in view of persisting fever. On 25/7/23 patient developed acute onset breathlessness, found to have tachycardia (180/min) with irregular rhythm which was reverted with IV Amiodarone. Next day he had anuria, constipation with absent bowel sounds. He was started on anti-hyperkalemia measures (K^+- 6.4) and first session of HD given. Received first dose of IV Cyclophosphamide (750mg) on 26/7/23. IV calcium gluconate (1g/day) infusion started for hypocalcaemia. During HD on 27/7/23, he developed respiratory distress and altered sensorium. O/E-hypotension, pin point pupils with right lower limb weakness. He was intubated, started on Inj. Noradrenaline. Next day, he had tachyarrhythmia (rate- 180/min), which reverted on its own. He had increased requirement of O2 and vasopressor support and had cardiac arrest from which he could not be revived and declared dead at 9.42am on 29/7/23.

Unit's final diagnosis: Systemic Lupus Erythematosus with haematological, renal, cardiac, and mucocutaneous involvement.

Cause of Death: Refractory cardiogenic shock with cardiac arrythmia.