From: "ROOT" <root@sctimst.ac.in>
To: "ROOT" <root@sctimst.ac.in>
Date: 28/07/2026 12:07 PM
Subject: CPC Clinical Handout 29.07.2026

Dear All,

The next Wednesday CPC of the session will be held tomorrow, **July 29, 2026** at **08.00 hours** (IST) in **Lecture Theatre 1**, Nehru Hospital, PGIMER, Chandigarh under the Chairmanship of **Prof. Sanjay Jain.**

The session will also be available on the Webex platform. Kindly follow the link below to join.

https://pgitelemed.webex.com/pgitelemed/j.php?MTID=md00288711fdbf94321a0819943e426a2

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. Karthi N, Department of Pediatrics.*** Radiology will be presented by ***Dr. Anmol Bhatia.*** Autopsy pathology will be presented by ***Dr. Hemlata***

Yours sincerely,

--
Regional Resource Centre, North
Department of Telemedicine
PGIMER, Chandigarh

Staff CPC (Date: 29 July 2026)

H	11 years	Boy	R/o Kaithal, Haryana	CR No. 2026*****59*	Ward: Allergy and Immunology

Clinician In Charge	Dr. Anju Gupta	**Clinical Discussant**	Dr. Karthi N
Clinical Team	Dr. Deepti Suri, Dr. Rakesh Pilania, Dr. Soumyadeep	**Pathologist**	Dr. Hemlata
Date of Admission	18 April 2026	**Radiologist**	Dr. Anmol Bhatia
Date of Death	13 May 2026	**Chairperson**	Dr. Sanjay Jain

Presenting complaints

Fever x 20 days • Breathlessness x 10 days • Pain abdomen x 3 days • Vomiting x 1 day

History of present illness

Previously well, developed high-grade intermittent fever (2-3 spikes/day, up to 106°F) with chills/rigors, afebrile interval x2 days, followed by breathlessness (day 10) requiring O2 support, then left-sided abdominal pain (day 17) and non-bilious vomiting. No rash, jaundice, bleeding manifestations, altered sensorium, joint swelling, TB contact, or animal exposure.

Pre-referral hospital course: Admitted with B/L crepitations, hepatosplenomegaly and edema. Labs showed anemia, neutrophilic leucocytosis, markedly elevated CRP/procalcitonin; started empirically on meropenem and vancomycin. US showed enlarging spleen, CECT chest/abdomen: lower lobe atelectatic bands, large splenic infarct (~70%), hepatomegaly with portal edema, mild ascites, jejunal edema, B/L pleural effusion. Thrombophilia workup: low protein C and S (APLA negative, DVT excluded); started on enoxaparin. Persistent fever spikes led to addition of amphotericin B (day 12); blood culture grew Cupriavidus pauculus, amphotericin stopped and ciprofloxacin/cotrimoxazole started per sensitivity. Referred to PGI for further evaluation.

Family history

1st born to non-consanguineous couple. Father daily wage labourer; Mother homemaker. Upper-lower socioeconomic scale. No family h/o TB, autoimmune disease, or malignancy.

Examination (at admission, PGI)

Temp 104°F | HR 134/min | RR 42/min | SpO2 82% RA, 93% on O2 4L/min | BP 110/44 mmHg | Wt 38 kg. Pallor+, hyperpigmented knuckles+; no rash, icterus, cyanosis, lymphadenopathy, or edema. RS: Decreased air entry at the bases. CVS: S1S2 normal, no murmur. P/A: soft, distended, hepatomegaly 4 cm, splenomegaly 4 cm, non-tender, no flank fullness. CNS: normal.

Hematology (selected)

Date	22/4	24/4	26/4	29/4	1/5	3/5	4/5	6/5	9/5	11/5	12/5
Hb (g/dL)	6.8	8.7	6.6	7.2	7.1	5.6	7.6	7.9	7.2	8.2	8.1
TLC (/mm3)	75,880	54,240	65,400	26,220	22,760	9,900	17,310	29,940	15,110	54,720	34,040
Platelets	6.04L	5.6L	2.93L	1.15L	56,000	48,000	55,000	24,000	50,000	77,000	47000
P%/L%/M%/E%	78/10/9/3	79/9/9//2	77/12/9/1	84/12/4/0	84/8/8/0		82/12/6/0	79/12/5/4	70/12/17/0	78/10/11/0	84/6/10/0
ESR / PS	32	Malaria -ve, toxic granules +									
MCV / MCHC	76.5/30		80/31	86/28		**Hb HPLC**	HbA2-2.6%	HbF – 0.3%		**DCT**	Neg

Biochemistry (selected)

Date	23/4	25/4	27/4	1/5	4/5	6/5	9/5	12/5
Na / K	140/4.07	141/3.6	150/3.8	153/3.7	153/3.54	148/3.03	137/3.42	135/5.2
Urea/Creat	25/0.35	30/0.5	45/0.66	139/1.32	95/0.74	57/0.51	31/0.40	33/0.48
AST / ALT	26/23	27/21	15/11	15/12	17/15	15/15	11/13	6/8
Albumin	2.7	2.6	2.3	2.2	3.1	2.7	2.9	3.2
T. bilirubin	0.55	0.49						0.69
Ca / Phos	8.2/3.6	8.1/4	8.4/4.2	8.2/5.8	8.6/4.1	8.6/4.5	7.6/4.6	7.8/5.3
Uric acid / LDH		2.8 / 850				- /207		
Amylase / Lipase		11 / 5						
CRP	222.6	220	353.4	85.6	8.75	37.3	15.9	102.6
Procalcitonin	100		-	28.4	-	-	5.6	
Ferritin	299	1174	-	-	-	-	-	

Coagulation profile (selected)

Date	23/4	28/4	1/5	5/5	9/5	12/5
PT / INR	21/ 1.86	31 / 2.7	31 / 2.74	18 / 1.62	18 / 1.60	21/1.9
APTT	34.2	39	37.2	30.6	28.7	28
Fibrinogen	5.1	4.7	2.3	1.47	1.74	1.71
D-dimer	1787	1012	1580	970	739	19809

Urine analysis

29/4 – Protein – Trace, RBC – Nil | 5/5 – Protein/Creat ratio: 3.32, RBC – 39/hpf

Fundus examination – Normal

CK-MB – 20 IU/L, **Echocardiogram:** No structural lesions, valves – Normal, no vegetations, LVEF – 65%

Cultures

Specimen	Result
Pre-referral Blood C/S	Cupriavidus pauculus (S: Cotrimoxazole)
Blood C/S (multiple, 20/4-27/4)	Sterile x5; one bottle: Staph. hominis (probable contaminant)
Blood C/S (13/5)	Candida tropicalis
Bone marrow C/S	Coagulase-negative Staphylococcus (likely contaminant)
ET aspirate C/S (x2)	Sterile / no significant growth
Urine C/S	Sterile

Infection workup

Test	Result	Test	Result
EBV viral PCR	Negative	WIDAL	Negative
CMV viral PCR	Negative	Brucella SAT	Negative
HIV	Non-reactive	Mycoplasma IgM	Negative
Leishmania rK 39	Negative	Mantoux	Negative
16s rRNA sequencing	Negative	GL CBNAAT x1	Negative

Immunology/Thrombosis/Genetic workup

Test	Result	Test	Result
C3	159 (81.8-195.4)	ANA	Negative
C4	48.8 (14.9-44.9)	ANCA	Negative
IgG / IgA / IgM	1170 / 105 / 109	NBT/DHR	Normal
DNTs	0.65% lymphs / 0.99% T cells	CD11a/CD18	Normal
Lymphocyte subsets	Normal B, T and NK cells		
ADA2 level	10.3 (normal)	NT pro BNP	2324 (raised)
Protein C / Protein S	67 (low) / 96 (normal)	Antithrombin III	92 (normal)
Factor V Leiden	Normal	APLA (ACA, LA, β2GPAb)	Negative
Whole Exome Sequencing (3/6)	Heterozygous duplication at 2p23.3 of multiple genes [ASXL2, HADHA, HADHB, PPP1CB, SPAST, NLRC4, ACTR2, IFT122] but uncertain clinical significance		

Bone marrow biopsy (24/4)	Normocellular, reactive changes

Imaging

US abdomen: hepatosplenomegaly, splenic infarcts → evolving splenic abscess; minimal left pleural effusion.

US renal/splenic Doppler: normal, no thrombosis.

CECT chest/abdomen: (24/4) hepatomegaly, splenomegaly with large wedge-shaped infarct, ascites, left pleural effusion with underlying collapse/consolidation.

CECT head: (12/5): Mildly prominent ventricular system

Course and management

Presented to ER with hypoxemia and compensated shock (brief noradrenaline support); started on supplemental O2 and empirical meropenem, vancomycin, cotrimoxazole; shifted to Allergy-Immunology ward on day 5. Hypoxemia progressed with left-sided minimal consolidation/effusion, requiring respiratory escalation — CPAP → NIV → intubation on day 7 for worsening respiratory failure. Antibiotics were escalated to ceftazidime-avibactam and aztreonam, with liposomal amphotericin B added later.

Persistent hyperinflammation with progressive cytopenia, and medium-vessel vasculitis as a key differential, prompted treatment with IVIG followed by a 3-day pulse of IV methylprednisolone. Clinical and laboratory parameters showed improvement with corticosteroids, allowing ventilator weaning and extubation; however, he was soon reintubated for upper airway obstruction and respiratory distress. During the later weeks, he developed acute kidney injury and encephalopathy both closely monitored, and new-onset hypertension was treated with labetalol infusion with transient response.

Post re-intubation, he developed quickly worsening hypoxemia on invasive ventilation, progressed rapidly to cardiac arrest, and succumbed to the illness.

Working diagnosis: Pyrexia of unknown origin with multi-organ dysfunction [infection vs vasculitis vs malignancy]