

**From:** "ROOT" <root@sctimst.ac.in>  
**To:** "ROOT" <root@sctimst.ac.in>  
**Date:** 13/08/2025 07:58 AM  
**Subject:** CPC Clinical Protocol 13.08.2025

---

The next Wednesday CPC will be held tomorrow, **August 13, 2025 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://pgitelemmed.webex.com/pgitelemmed/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. Basant Kumar, Department of Cardiology**. Radiology will be presented by **Dr. Harish Bhujade**. Autopsy pathology will be presented by **Dr. Uma Nahar**.

© All rights reserved with the Postgraduate Institute of Medical Education & Research, Chandigarh, India. Any unauthorized use of the contents of the session, either video, audio or graphic, in whole or part of it will amount to copyright violation. The distributed clinical content is anonymized and meant purely for educational purposes.

Yours sincerely,

--

Regional Resource Centre, North  
Department of Telemedicine  
PGIMER, Chandigarh

## STAFF CLINICOPATHOLOGICAL CONFERENCE 13/08/2025

**Ms X - 15 years/female CR no - 202501397779, Admission No – 2025012206, R/O Mohali, Punjab.  
DOA: 05/2/25 (EMOPD); DOD: 18/2/25**

**Clinician in charge: Prof Ajay Duseja,  
Radiological Discussant: Dr. Harish Bhujade**

**Clinical Discussant: Dr. Basant Kumar  
Pathologist- Prof. Uma Nahar**

### Chief Complaints:

Pain abdomen x 10 days, Cough x 10 days, Shortness of breath x one week

**History of present illness:** Patient was asymptomatic approximately one week back when she started having pain abdomen - sudden onset, dull aching type, in the epigastrium region and right upper quadrant, VAS - 5-6 /10, moderate intensity, increased on movement, a/w nausea, no relation to food intake, non-progressive, relieved on taking oral analgesics, taking rest, a/ w vomiting, multiple episodes, watery, non-bilious, non-projectile, no blood in vomitus, She also started having dry, cough progressive, currently productive, minimal expectoration, not a/w chest pain, no postural/diurnal variations. For the last 1 week, she started having dyspnea on exertion, which progressed from NYHA 1- 4, a/w orthopnea and swelling of feet. No history of oral ulcers /photosensitivity/malar rash. No h/o decrease in urine output/dysuria/frothuria. No h/o of AMS /loss of consciousness. On evaluation outside, she was found to have transaminitis (ALT>AST) – 990, ALP – 410, TB/DB- 2.1/1.5, TP/Alb - 6.4/3.2

**Past history:** No h/o HTN, BA, CAD, Epilepsy

**Family history:** h/o leukemia in brother, taking treatment from PGI.

**Personal history:** Veg diet, sleep intact, and appetite decreased, Normal bladder, bowel: no h/o high-risk behaviour, No h/o tobacco use and smoking.

### GENERAL EXAMINATION.

Patient was conscious and oriented to time, place, and person.

At admission, PR- 116/min, BP - 98/62mmHg, RR-22/min, SpO2- 98% at room air

Pallor- present Icterus- absent No cyanosis, clubbing; Edema -bilateral pitting edema + till above ankles. Oral cavity – normal **CVS:** S1S2 present. No murmur. **RS:** Right infra-scapular and infra-axillary area crepitations present. Rest - NVBS. **Abdomen:** Soft, Tenderness absent. No HSM, FF-, BS+ **CNS:** HMF normal No FND

#### INVESTIGATIONS:

#### Blood gas analysis

|            | 5/2    | 7/2         | 10/2 | 12/2  | 15/2  | 17/2 | 18/2    |
|------------|--------|-------------|------|-------|-------|------|---------|
| Hb         | 10.6   | 9.8         | 10.5 | 10.1  | 10.2  | 10.1 | 10.3    |
| TLC        | 22k    | 15.8k       | 18k  | 19.5k | 18.9k | 17k  | 15.9k   |
| DLC        | N78L21 | N 75.2L23.2 |      |       |       |      | N84L7.8 |
| Platelet   | 126k   | 68k         | 89k  | 133k  | 124k  | 110k | 92k     |
| MCV        | 78.9   | 82.1        | 79.7 | 80.9  | 82.3  | 79.7 | 79.4    |
| Reti count |        |             |      | 5.91% |       |      |         |

| Date |       | 13/2  | 15/12 | 17/2  |
|------|-------|-------|-------|-------|
| pH   | 7.432 | 7.423 | 7.353 | 7.487 |
| pO2  | 48.9  | 52    | 42.1  | 56.9  |
| HCO3 | 17.3  | 19.3  | 20.3  | 22.4  |
| pCO2 | 27.6  | 22.3  | 37.4  | 30.6  |

|             | 5/2         | 7/2            | 10/2            | 13/2            | 15/2            | 17/2           | 18/2            |
|-------------|-------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|
| Na/K        | 127/5.61    | 123.5/5.92     | 117/5.45        | 109/4.82        | 112/5.38        | 118/3.48       | 127.1/1.87      |
| U/Cr        | 75/1.03     | 96.5/1.2       | 76.6/1.03       | 79.8/1.02       | 100.3/1.39      | 116.3/1.36     | 74.6/1.02       |
| AST/ALT/ALP | 3526/2860/- | 7494/5518/201  | 1648.4/3103/189 | 359.9/978.2/180 | 491.2/757.9/182 | 408.7/553/175  | 397.4/174/462.2 |
| STP/Alb     | 6.1/3.8     | 5.87/3.56      | 5.54/3.41       | 5.54/3.44       | 5.67/3.35       | 5.71/3.20      | 5.81/3.35       |
| TB/DB       | 3.2/1.1     | 3.46/1.67      | 3.76/1.96       | 4.06/2.45       | 5.42/3.62       | 4.28/3.07      | 4.15/2.58       |
| Ca/P/Mg     |             | 8.43/2.62/1.73 | 8.23/2.72/1.93  | 8.23/2.72/1.93  | 8.56/4.08/2.09  | 8.80/2.98/1.92 | 7.26/2.02/1.32  |
| LDH         | 6866        |                | 789             | 455             | 556             | 609            | 723             |

| Hyponatremia W/u                     |              |
|--------------------------------------|--------------|
| S Osmolality                         | 260 mosml/kg |
| U Osmolality                         | 520 mosml/Kg |
| Urine Na+/K+( Spot)                  | 30.4/102.6   |
| Cortisol/ACTH                        | 938/16.6     |
| TSH                                  | 5.29         |
| Hemolytic work up                    |              |
| DCT, G-6-P D, Plasma Hb and Urine Hb | Negative     |
| Haptoglobin                          | 23.6 (low)   |

| SEPSIS WU           |                                     | Hepatitis wu   |          | COAG            | 05/2 | 11/02       | 15/02    | 18/02 | C3/C4                                   | 27.0/3.1        |
|---------------------|-------------------------------------|----------------|----------|-----------------|------|-------------|----------|-------|---|-----------------|
| Blood C/s           | Sterile                             | HAV IgM        | Negative | PT              | 44.1 | 31.1        | 29.2     | 28.4  | ANA                                     | 2+, centromeric |
| (multiple samples)  | (peripheral + central line)         | HbsAg          | Negative | PTI             | 25%  | 36%         | 38%      | 39%   | Anti ds DNA                             | Negative        |
| Urine C/s           | Sterile                             | HCV Ab         | Negative | INR             | 3.94 | 2.78        | 2.65     | 2.54  |   |                 |
| Serum procalcitonin | 0.698                               | HIV            | Negative | APTT            | 34.0 | 37.1        | 38.4     | 44.2  |   |                 |
| HLH w/u             | Negative, H score < 5% probability. | Anti Hbc total | Negative | Fib             |      | 2.78        |          |       |   |                 |
|                     |                                     | AH Panel       | Negative | D dimer         |      | 3300        |          |       | Leptospira IgM                          | Negative        |
|                     |                                     | Total IgG      | 1013     | ProBNP          |      | 48979 pg/ml | 3686     |       | Widal test                              | Negative        |
|                     |                                     |                |          | Trop T          |      |             | 20 ng/ml |       | Malaria Ag and PBF for malaria parasite | Negative        |
|                     |                                     |                |          | COVID RTPCR     |      |             | Negative |       | Dengue IgM                              | Negative        |
|                     |                                     |                |          | Influenza RTPCR |      |             | Negative |       |   |                 |
|                     |                                     |                |          | CMV PCR         |      |             | Negative |       |   |                 |
|                     |                                     |                |          | Parvo PCR       |      |             | Negative |       |   |                 |

**Chest x-ray-** Cardiomegaly with b/l pleural effusion with cephalization of pulmonary veins.

**USG abdomen: (05/02/25)** – Mild ascites, b/l mild pleural effusion, Mild periportal cuffing noted. Rest WNL

**USG B/L Lower limb DVT scan (12/2/25)** – no evidence of DVT

**CTPA (13/2/25)** – No evidence of PTE, b/l mild pleural effusion seen, dilated cardiac chambers present.

**2D Echo (12/2/25)** – All chambers dilated, Severe MR/TR, AoV- 0.8, Mild AR, Global LVHK+, EF 15-20%, TAPSE 14mm, No PE/Clot/Vegetation.

**COURSE AND MANAGEMENT:** – 15-year-old female symptomatic from February 1st, with the patient experiencing dull aching abdominal discomfort, and a few episodes of vomiting. She also developed dyspnea on exertion, initially classified as NYHA II, which progressed to class IV over the next 10 days, accompanied by a dry cough. There was no history of fever, jaundice, altered bowel habits, or reduced urine output. Laboratory tests conducted outside PGI on February 4th showed AST/ALT/ALP levels of 860/995/410, TB/DB of 2.19/1.5, STP/Albumin of 6.4/3.2, and Na/K of 127/6.22. Due to these findings, she was referred to PGI for further evaluation. On arrival at PGI, there was no documented hypotension. Her AST/ALT levels were 3526/2860, and TB/DB was 3.2/1.11. An ultrasound of the whole abdomen revealed bilateral mild pleural effusion, mild ascites, and periportal cuffing. During her stay in the EMOPD, her transaminases peaked at 7000 before showing a declining trend, with OT > PT initially. She was started on Ceftriaxone and Doxycycline; however, workup for tropical fever was negative. She received one day of NAC during her EMOPD stay, and viral markers were sent for evaluation. On February 10th, she developed worsening shortness of breath with orthopnea but maintained urine output. On February 11th, she was shifted to the Transplant ICU. She was initiated on NAC infusion and continued on Ceftriaxone and Doxycycline. A 2D-Echo revealed an EF of 15-20%, global left ventricular hypokinesia, and dilatation of all cardiac chambers. ProBNP was elevated, and she had persistent tachycardia. A working diagnosis of acute myocarditis with ischemic hepatitis was considered, with a differential of viral versus autoimmune aetiology. Infectious Disease and Rheumatology consultations were obtained. Viral workup was negative, but C3/C4 levels were low, and ANA was positive (2+) with a centromeric pattern. She was started on low-dose diuretics and inotropic support to maintain MAP and renal perfusion. A decision regarding the use of steroids versus IVIG was considered but deferred after cardiology and rheumatology consultations, with a likely diagnosis of self-limiting viral myocarditis. Initially, her norepinephrine requirement was 8 µg/kg/mt, but urine output remained adequate. Later, although creatinine rose slightly, urine output was preserved, and her inotropic requirement decreased to 4 µg/kg/mt. On the evening of February 18th, she experienced sudden worsening of shortness of breath, hypotension, and tachycardia (HR 170 bpm). She was managed with double inotropes and oxygen support, and a CTPA was planned to rule out pulmonary thromboembolism (PTE). Her sensorium declined with worsening hypoxia, leading to intubation and transfer to the LICU. While being shifted, she suffered a cardiac arrest but achieved return of spontaneous circulation (ROSC) after 3-4 cycles of CPR. She was placed on mechanical ventilation but experienced another cardiac arrest, from which she could not be revived. She was declared dead at 10:37 pm on February 18th, 2025. Consent was obtained for an autopsy.

**Diagnosis:** Dilated Cardiomyopathy, LV EF - 10-15%? Post-viral myocarditis, Ischemic hepatitis, Cardiorenal syndrome

## Attachments:

File: [CPC Clinical Protocol 13.08.2025.pdf](#)

Size:  
190k

Content Type:  
application/pdf