From: "ROOT" <root@sctimst.ac.in>
To: "ROOT" <root@sctimst.ac.in>
Date: 06/01/2026 11:55 AM
Subject: CPC Clinical Protocol 07.01.2026

Season's Greetings and a very Happy New Year 2026 to all.
Welcome back to the New Academic Session, 2026.
The first Wednesday CPC of the session will be held tomorrow, **January 07, 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. Abeer Goel, Department of Neurology.*** Radiology will be presented by ***Dr. Anuj Prabhakar.*** Autopsy pathology will be presented by ***Dr. Debajyoti Chatterjee.***

Yours sincerely,

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Regional Resource Centre, North
Department of Telemedicine
PGIMER, Chandigarh

CPC CLINICAL PROTOCOL (07.01.2026)

Name: Mr. A. **Age/Sex:** 24 Y/M
CR No: 202404807488
Clinician In charge: Dr. Mohan Kumar
Clinical Discussant: Dr. Abeer Goel
Pathology Discussant: Dr. Debajyoti Chatterjee
Radiology Discussant: Dr. Anuj Prabhakar
Date of Admission: 04.11.2024
Date of death: 15.12.2024

Presenting Complaints: Mr. A was apparently asymptomatic until 25 October 2024, when he developed fever of insidious onset, high-grade, with a maximum documented temperature of 103°F, intermittent in nature, and associated with chills, rigors, and night sweats. The fever showed no diurnal variation and was partially relieved with medications. There were no associated symptoms such as vomiting, loose stools, skin rash, abdominal pain, dysuria, or jaundice. There was no history of recent travel or vaccination.

On 31 October 2024, the patient developed altered mental sensorium, characterized by decreased responsiveness and reduced interaction with family members. He became bedbound, with inability to ambulate, and developed urinary and faecal incontinence. There was no history of headache, vomiting, seizures, focal limb weakness, facial deviation, or visual disturbances.

He was initially managed at a local hospital with intravenous antibiotics for two days, without any significant improvement in sensorium. In view of persistent altered consciousness, he was subsequently referred to the Emergency Medical Outpatient Department (EMOPD), PGIMER, on 3 November 2024 for further evaluation and management.

Past history: Nothing significant

Personal history: Intravenous Drug user in form of Chitta from June 2023 and Tapentadol tablets (dissolved and taken as injections) from Jan 2024

Family history: Nothing significant

On examination:

GENERAL EXAMINATION.

On admission in EMW-22:
Patient was sedated and paralyzed
GCS-E1VTM1
BP:116/80 mm Hg right arm in supine position
PR: 120/min
Sp02: 98% under CMV(V) with PEEP-6 and FiO2-50%

P+I-C-C-L-E-JVP-

Thin built
Temporal hollowing
Frontal hairline recession
Poor oral hygiene
Tattoo marks in body as mentioned in history
Birth mark in form of a mole over sternum
No IV Drug use marks appreciated

SYSTEMIC EXAMINATION:

CVS- S1, S2 heard, no murmurs
RS: Normal vesicular breath sound heard bilaterally, no added sounds
Abdomen: Soft, non-tender, mild distension
No organomegaly Bowel sounds heard

CNS: Patient was sedated and paralyzed
E1VTM1
Neck rigidity - Absent
Kernig's and Brudzinski's sign can't be elicited
B/L pupil constricted but reacting to light, Fundus normal
Bulk-Normal and equal in B/L upper and lower limbs
Tone-No rigidity/flaccidity in B/L upper and lower limbs
Power- Couldn't be examined

Reflexes-	Right Side	Left Side
Biceps	1+	1+
Triceps	1+	1+
Supinator	-	-
Knee	1+	1+
Ankle	-	-

B/L plantar reflex – Flexor in Rt side, Mute in Left side

Investigations

Date	3/11/24	23/11/24	28/11/24	3/12/24	10/12/24	13/12/24	14/12/24
Hb	11.4	**8.5**	**9.8**	**8.5**	**6.4**	**7.8**	**7.7**
TLC	**15400 (N84L9)**	6870 (N67L21)	6620 (N60L30)	9200 (N71L20)	8400 (N79L15)	10700 (N66L26)	11700 (N87L9)
Platelet count	331K	301K	223K	101K	121K	221K	143K
SE	134/4.02	136.1/3.78	151.2/3.70	**151.8/3.25**	**155/3.16**	**162/4.5**	**155/5.6**
RFT	**97/0.56**	28.2/0.43	55.4/1.21	79.9/2.12	131/1.25	109/2.1	161/3.1
Ca/P	10.3/-	8.44/1.71/2.05	8.3/3.8/2.1	7.36/4.9/2.2	8.6/6.2/2.5	8.7/7.8/1.7	8.3/9.2/1.9
OT/PT/ALP	27/26/-	22/23.5/77	19/20/89	36/19/83	29/18/117	41/45/161	77/35/227
TB/CB	0.63/0.26	0.39/0.14	0.47/0.21	0.50/0.26	0.29/0.17	0.7/0.3	0.7/0.45
TP/Alb	7.1/4.17	5.6/2.7	6.2/3.4	4.75/2.31	6.0/2.76	5.7/2.8	5.4/3.4
PT/INR	16/1.43	-	-	21.5/1.91	18.9/1.71	17.7/1.64	-

CSF workup:

Date	5/11/24	9/11/24
Protein/Sugar	**163/18 Corresponding RBS-137**	**116/22**
TC/DC	**3495 $N_{62}L_{38}$**	**277 $N_{59}L_{41}$**
GS/Culture	Sterile	
ADA level	4.0	
AFB/ CBNAAT	Not detected	
Fungal Smear and Culture	Negative	
Cryptococcal Ag	Negative	

Anemia Workup

PBF-Normocytic Normochromic Red Cells with Anisopoikilocytosis
Retic-2.9%
Iron Profile-Fe-120, Ferritin->2100, TIBC-163, TSAT-78.5%
Vitamin B12->2000
Folate->20
Stool RME-Normal
Stool for Atypical Organisms/Cryptosporidium-Not found
Stool C/S-Sterile

Hemolytic Workup

Serum G6PD level-Normal
Urine Hb-Nil
Plasma Hb-Not Raised
DCT (Anti IgG and Anti C3d)-Negative
Haptoglobin-<6.71

Viral Marker

HIV1/2-NR (7/11)
HBsAg-Positive (7/11)
HBV DNA Titer-TND (10/11)
Anti HCV Antibody-Positive (7/11)
HCV RNA Titer-TND (10/11)

Fungal Markers

Serum Beta D glucan-Negative
Serum galactomannan index-Negative

4. Hormonal Profile (5/11/24)

ACTH-23, **Cortisol-97**
TSH/T3/T4-2.3/0.53/**4.0**
HbA1c-3.2
iPTH-21.8, VitD3-11.0

2D Transthoracic ECHO-(14/11/24)

LVEF- 60-65%
No RWMA
Normal valves, E/A- 1.8
No clots/ vegetation

Sepsis workup:

Date	**4/11/24**	**10/11/24**	**16/11/24**	**23/11/24**	**1/12/24**	**8/12/24**
Blood c/s	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation
Urine c/s	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation	Sterile after overnight incubation
Urine Routine and microscopy	WBC nil Protein 1+ Blood 2+	-	-	WBC nil Blood 3+ Protein Trace	-	-
Procalcitonin	0.153	0.371	**22.3**	**9.8**	0.795	0.67
ET Aspirate w/u	Sterile	Sterile	A.*baumanii* sensitive to Minocycline and IS to colistin	Sterile	Sterile	Sterile

USG ABDOMEN (5/11/24):

Grossly Normal study, No hepatosplenomegaly or any heterogenous echoic lesions noted in liver or spleen

CECT Chest+ Abdomen (5/11/24):

Secretions in Trachea
Centrilobular nodules in right upper and lower lobes likely aspiration pneumonitis
Hepatomegaly

CEMRI Brain (7/11/24):
Multiple ill-defined lesions showing altered SI with mild surrounding vasogenic edema in B/L capsuloganglionic regions, subcortical white matter of the bilateral frontal, temporal and left parietal lobes. Lesions show irregular T2 hypointense walls and T2 hyperintense central portions and restricted diffusion in the walls of it. Lesions show peripheral ring enhancement and hypoperfusion. Most of them show susceptibility changes s/o microhemorrhages within.
B/L lateral ventricle ependymitis with choroid plexitis.
Mild leptomeningeal enhancement with thickening

CEMRI Brain (21/11/24):
Significant interval increase in size of the mass lesions described in earlier scan
With bilateral choroid plexitis and ventriculitis
Diffuse circumferential vessel wall enhancement of intracranial vessels

Stereotactic Brain biopsy report (25/11/24):
Biopsy shows multiple fragments showing necrosis, nuclear debris and polymorph rich inflammation indicating necrotizing inflammation consistent with abscess.
PAS stain highlights presence of PAS positive fungal profiles with bulbous ends indicating phaeohyphomycosis.
ZN and Gram stains were negative.

CEMRI Brain (27/11/24):
Multiple lesions as described above with diffuse gyral swelling of bilateral cerebral and cerebellum with subfalcine and descending transtentorial herniation and effacement of suprasellar and interpeduncular cistern.

Posterior fossa is completely effaced with herniation across foramen magnum. Absent of opacification in intracranial vessels with prominent medullary, ependymal and cortical veins seen
Radiological features are consistent with diagnosis of brain death.

Blood gas Analysis:

Date	pH	pO2	pCO2	HCO3-
3/11/24	7.376	119.5	39.2	22.4
14/12/24	7.132	158.1	60.3	19.7
15/12/24 Pre terminal	7.110	147.2	41.9	11.2

Course and Management:

A 24-year-old intravenous drug user, seropositive for hepatitis B and C, presented to EMOPD, PGIMER on 3 November 2024 with persistent fever and altered sensorium. Due to poor GCS (E2V3M3), he was intubated and shifted to Hall A. CSF analysis was suggestive of septic meningitis, and he was transferred to EMW-22 on 4 November 2024.Neuroimaging revealed multiple intracranial space-occupying lesions suspicious for pyogenic brain abscesses, with no extracranial source identified on CT chest and abdomen. He was treated with intravenous ceftriaxone and vancomycin.

Owing to persistent fever, poor neurological recovery, and development of shock, antimicrobials were escalated to meropenem and vancomycin on 8 November 2024, with addition of empirical liposomal amphotericin B. Repeat CEMRI brain on 21 November showed interval increase in lesion size, and stereotactic brain biopsy was performed on 24 November 2024.

Over next few days, sensorium worsened (GCS E1VTM1), and repeat CEMRI on 27 November demonstrated features consistent with brain death. The patient developed acute kidney injury, necessitating discontinuation of meropenem and amphotericin B, and antimicrobials were modified to polymyxin B and vancomycin. Based on biopsy findings of PAS-positive fungal elements suggestive of phaeohyphomycosis, itraconazole was added.

He underwent tracheostomy on 3 December 2024 and maintained adequate oxygenation. Subsequently, he developed hypernatremia, worsening shock, oliguric AKI, and severe metabolic acidosis. Hemodialysis could not be initiated due to refractory hypotension.

The patient suffered cardiac arrest on 15 December 2024. Despite ACLS-guided resuscitation, spontaneous circulation could not be achieved, and he was declared dead at 2:46 PM. Medico-legal autopsy was performed with family consent.

Unit's Final Diagnosis:
Intravenous Drug User
With Multiple Intracranial Space Occupying Lesions (Etiology-? Fungal Abscess)
Raised intracranial pressure with brain herniation and brain death

Cause of Death: Refractory septic shock