From: "ROOT" <root@sctimst.ac.in>
To: "ROOT" <root@sctimst.ac.in>
Date: 09/04/2025 07:52 AM
Subject: CPC Clinical Protocol 09.04.2025

Dear All,
The next Wednesday CPC of the session will be held tomorrow, **April 09, 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://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. Chamanjot Kaur, Department of Neurology.*** Radiology will be presented by ***Dr. Vikas Bhatia***. 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 (09.04.2025)

Name: HCK **Age/Sex:** 72 Y/M
CR No: 202403695368
Clinician In charge: Prof Vivek Lal
Clinical Discussant: Dr Chamanjot Kaur
Pathology Discussant: Dr Debajyoti
Radiology Discussant: Dr Vikas Bhatia
Date of Admission (1st): 25.08.2024 - 30.09.2024
(2nd): 16.10.2024
Date of death: 30.11.2024

Presenting Complaints: Mr. HCK, 72 years gentleman presented with complaint of holocranial headaches since 4months, i.e. April 2024. One month into the illness he started to have imbalance while walking with swaying to either side for which he was evaluated and treated outside.

2 months into the illness, he started to have behavioural abnormalities in the form of forgetfulness, navigational difficulties at home, visual hallucinations and aggressivess in his behaviour in the background of worsening headaches. He was evaluated in a private hospital where they found that he had shock and Mobitz type 2 block, following which he had TPI implantation. He underwent CSF analysis, MRI brain and PET scan. In subsequent days he had an episode of generalized tonic clonic movements. He was diagnosed to have cryptococcal meningitis and was started on anti-fungal drugs. Even after treatment, he developed facial deviation to right side with difficulty in closing left eye.

He was shifted then to another private hospital with the same complaints (**3months into the illness**) where he was evaluated with repeat CSF, CEMRI Brain, HRCT chest and managed.

4 months into the illness he started to have worsening of headache, associated with vomiting, blurring of vision and also altered sensorium. He also developed stiffness in all arms and legs along with slowing in his daily activities. Given IVMPS 1gm in private hospital after which no improvement.

He was then admitted in our hospital on 25 Aug 2024 **(4 and half months into the illness)** with the above-mentioned complaints. He was evaluated with detailed serological tests, CSF analysis, CEMRI Brain, skin lesion biopsy, lung biopsy and FDG PET scan. His symptoms improved significantly with the treatment and was discharged after a month i.e. on 30 Sept 2024 with the diagnosis of Disseminated Cryptococcosis (CNS+Lung), drug induced AKI, external hemorrhoids and Anaemia of chronic disease.

6 months into the illness (i.e. on 16Oct 2024) he was again admitted in PGIMER, with complaint of worsening of headaches, increased stiffness with decreased movements in arms and legs, and fluctuation in his sensorium.

Personal history: Smoker (1-2 bidi bundles per day) for 50years. Alcohol intake (2-3times a week) for 50years.

Family history: Father h/o blood cancer. Mother h/o DM. two siblings have DM, one has CLD. No h/o similar complaint in family.

On examination:

GENERAL EXAMINATION.	**SYSTEMIC EXAMINATION:**
On admission: cachexic, generalised wasting+ GCS: E3V5M6 (irrelevant talking+) BP- 124/80 mmHg; P- 76/min, irregular RR: 20/min; Temperature: 37 C SpO2- 97% at RA Pallor +, Icterus, Pedal edema, Clubbing LAP, Cyanosis- absent	**CVS, CHEST ABD: NORMAL** **CNS: GCS 14/15** **Cranial nerves:** V/A, fundus: no disc edema. Pupils: photophobia+, NSNR. EOM- CNBA. Left LMN 7th cranial nerve palsy, 8th CN-CNBA, 9th 10th CNBA **Motor:** Generalised hypertonia+ (Rt>Lt) Power 5/5 all groups, DTRs: Rt BTSK 1+A0, Lt BTS 3+K1+A0. Plantar RT flexor, Left Extensor **Sensory:** couldn't be assessed **Extrapyramidal:** Rigidity + (rt>lt), Rt Torticollis

Investigations

	16/10/24	19/10/24	23/10/24	01/11/24	07/11/24	18/11/24	24/11/24	27/11/24	29/11/24	30/11/24
Hb	9.6	7.9	10.8	11	10.1	9.7	**7.6**	10.1	11.9	9
TLC	5600	4140	7460	13000	16300	13990	5800	9740	5000	390
DLC	N 66.8 L 15.9 M 13.9 B 0.7	N 79.8 L 11.3 M 8.4	N 71.8, L 15.1 M 9.1 E3.5	N 82.6 L 10.8 M 6.4	N 86 L 6.6 M 7.2	N 90.7 L 6.1 M 3.2	N87.9 L7.8 M2.6 E1.4	N89.3 L7 M3.3 E0.1	N69 L22.6 M3.5 E3.9	N53.9 L41 M5.1
PLATELET	2.41L	1.65L	2.99L	3.31L	2.13L	1.31L	1.12L	1.27L	**0.9L**	0.63L
Na/K	132.5/4.01	137/3.3	139.7/4.02	142/4.2	140/4.47	135.3/4.6	131.2/4.66	128.2/4.1	125.3/4.3	130.5/3.9
Urea / Creat	26.7/0.67	24/0.8	36.3/0.95	89.5/1.10	73.1/1.25	72.1/1.06	38.2/0.91	36.3/0.76	34.4/0.81	36.1/1.07
Bilirubin T/C	0.29/0.16	0.2/0.14	0.36/0.20	0.44/0.25	0.5/0.31	0.80/0.43	0.66/0.39	0.60/0.29	0.57/0.11	0.32/0.19
AST/ALT	75.6/47.5	24/16	32.9/24.5	26/102.2	11.2/51.6	21.3/57.8	16/45.1	16.4/29.4	34.2/32.8	73.3/11.4
Protein (T/A)	6.11/3.31	5.6/2.8	6.97/3.80	6.98/3.92	5.54/3.57	5.3/3.55	4.82/3.08	5.39/3.01	4.39/2.14	2.95/1.44
Ca/ PO4	9.02	8.2/2	10.10/2.75	9.88/2.63	8.81/3.69	9.14/5.31		8.71/3.15	8.07/2.74	7.35/6.82
PTI-INR	1.1	-					1.44			
LDH/CRP		108/64	143/28.53	135/1.29	121/3.73	179		232/32.6	414/84.9	
CK-NAC		40			12					
Urine RME	PC<5,sugar, protein, nitrite-				PC<5,sugar, protein, nitrite-			PC<5,sugar, protein, nitrite-		

Iron Profile	Aug2024: S. Iron: 122, TIBC :184, % Saturation:66.3, S. Ferritin:>2100		
Urine Culture	08/11/24: Klebsiella pneumoniae		
Blood culture	03/09/24: neg, 19/09/24: sterile		
Fecal calprotectin	23/11/24: 1070 ESR: 65		
Procalcitonin	07/11/24: 0.0851		
Stool examination	**07/11/24** Mucus, pus cell, cyst, ova, trophozoite NIL no atypical org	**11/11/24** Mucus, pus cell, cyst, ova, trophozoite NIL no atypical org **Cryptosporidium stain negative** **Stool CDTA negative**	**25/11/24** Mucus, pus cell, cyst, ova, trophozoite NIL no atypical org
Stool culture	No growth of salmonella or shigella		No growth of salmonella or shigella
Lymphocyte subset	CD3: 82.4% (1360), **CD4: 33.8% (558) (244 outside)**, CD8: 49.6% (818), CD18: 10.7%(177), CD56: 7.3%(120)		
Miscellaneous	**Serum cryptococcal Ag: positive**, S. VDRL: Neg, HIV: NR, HBsAg NR, HCV NR, HSV serology: neg, Vit B12: >2000, FA 7.87, Direct Coombs test Neg, G6PD neg, PSA 0.936, Autoimmune paraneoplastic panel negative 30/11/24 (5.30pm): CKMB <1, Myo >500, TropI <0.05, BNP 69.6. Ddimer 459		
Infectious serology	29/08/24: brucella AT neg, Toxo IgG neg, CMV IgM neg, Malaria Ag neg, leptospira IgM neg, Widal neg		

CSF Analysis

	28/08/2024	07/09/2024	23/10/2024	18/11/24
Opening pressure			10cm	
Cells	142 (N3%, L97%)	123 (N47%, L53%)	25 N10.4% L89.6%	20 N10.1% L89.9%
Protein	339	47	950	284
Sugar	40(195)	53	21	56
GS/CS	Neg/ sterile			Neg
Crypto Ag	**Positive**	**Positive**	**Positive**	**Positive**
Fungal smear	Negative	Negative		
Cryptococcal culture	**Negative**	**Negative**		
Malignant cytology	Negative	Neutrophils+ Activated lymphocytes.		
Gene Xpert	Negative			Negative
AFB	Negative		Negative	
Culture	Sterile	Sterile		Sterile
Parasites	No parasite seen			

HRCT Chest (15/05/24) At private hospital: spiculated soft tissue nodular lesion in anterior segment of RUL

FDG PET CT Report (02/09/2024): low grade FDG avid leptomeningeal thickening in bilateral occipital lobes. FDG avid nodule in RUL anterior segment (1.4*1.1cm SUVmax 10.1), mediastinal lymph nodes and bilateral bulky adrenal glands (right SUVmax 8.8)

Skin biopsy (07/09/24) s/o seborrheic keratosis

PET guided biopsy of right lung nodule (14/09/24) sheets of foamy histiocytes harboring variable sized spherical fungal profile compatible with cryptococcus highlighted on PAS AB stain. Moderate lymphoplasmacytic infiltrate seen. F/S/O Cryptococcosis

USG Abdomen (08/11/24): Hepatomegaly (17.2cm) with bilateral raised renal cortical echogenicity with maintained CN differentiation.

Sigmoidoscopy (12/11/24): complete loss of vascular pattern with mucosal friability and granularity. No bleeding or ulcer. Biopsy taken.

Colonoscopy (24/11/24): Complete loss of vascular patter, mucosal edema, aphthous ulcers with hyperemia and erosive superficial ulcers seen in rectum, sigmoid, transverse colon, descending and ascending colon. Initial 5sm of ileum also shows aphthous ulcers, hyperemia and erosions.

Course and Management:

72years gentleman, diagnosed as disseminated cryptococcosis, was given induction therapy in the form of Liposomal Ampho B dose 3mg/kg and Flucytosine dose 1500mg QID, he was discharged on Flucytosine and fluconazole 400mg/day. After 15 days, he was **again admitted** with worsening of symptoms. He was re-evaluated and possibility of drug resistant cryptococcosis / cryptococcal IRIS was kept. Along with LAMB, flucytosine 1500QID, fluconazole 800/day. With the possibility of cryptococcal IRIS, steroids (dexamethasone 4mg OD) were started. Neurosurgery consultation for shunting was taken which was subsequently not done. In view of static radiology and non-improving symptoms, thalidomide 100mg/day was also added. He had Hb drop which was attributed to external hemorrhoids and subsequently managed. 20 days after admission he developed persistent diarrhea -not responding to conventional antibiotics. Possibilities kept were infectious vs drug related diarrhea. Subsequently stool frequency further increased to upto 12 episodes/day and flucytosine was withheld. On 29/11/24 in evening, he had sudden onset hypotension with respiratory distress, developed metabolic acidosis. He was started in inotropic and oxygen support. He was not intubated in view of DNR consent by the attendants. went into cardiopulmonary arrest on 30/11/24 at 1:00pm.

Units Final Diagnosis: Disseminated Cryptococcosis (CNS + Lung) ??Cryptococcal IRIS
Acute pancolitis (drug induced / infectious)
Hemorrhoids
Bed sore

Cause of Death: Refractory shock