

HIV vs COVID-19



HIV	
BLOOD INDICES	HIGH /LOW
FBC	Low HB,MCV ,Platelets ,(pancytopaenia)
U & E	GFR ≤50
LFT	HIGH= ALP,GGT,ALT,AST,LDH
ALBUMIN	Low
CRP	>5 or High
ESR	N or High
IL-6	N or slightly elevated
D-dimer	N >0.50
CD4 count	Low range 100-200
Viral log value	≤ 3.00

COVID-19	
BLOOD INDICES	HIGH /LOW
FBC	Lymphopaenia , N or Low Platelets
U & E	GFR = N or ≤ 50
LFT	LDH High
ALBUMIN	Low
CRP	>33 mg/L
IL-6	>73 pg/ml
LDH	HIGH
D-Dimer	>1.50
CD4 count	N – low in severe disease

Approach to diagnosis



- Pneumonia- exclude TB –TB PCR test ,TB culture ,Biopsy, Sputum MCS ,Fungitelle
 - Covid-19 Nasopharyngeal PCR Test
 - Chest X-ray
- High clinical suspicion of TB: FBC = Anaemia of Chronic Disorders

:Newly diagnosed HIV with low CD4 ≤ 200-urine LAM test

:Defaulted ART –log value ≥ 3.00

Atypical presentation linked to Covid-19 infection

□ TREATMENT

- DRUG –DRUG interactions (Acetemera risk/benefit) consider Remdesivir
- TB treatment first (Stagger TB treatment depending on liver enzymes)
- Treat any underlying infection esp. fungal infection
- Electrolyte or blood abnormalities
- Differ HIV treatment (IRIS)

CASE 1



- 38 year old male known with HIV on ART,CD4 160, VL =2.35, Covid-19 positive
- Presented with a 3week history SOB ,consulted at a private doctors, treated for flu symptoms
- COVID-19 test positive ,Chest X-ray –Enlarged CTG ratio, Pericardial rub ,Pericardiocentesis
- ProBNP= 561

BLOOD TESTS	08/08/20	14/08/20	18/08/20
НВ	10.5		
MCV	84.5		
Lymphocytes	0.12 L		
Platelets	452		
ALT		71	
AST		57	
D-dimer	8.43	7.07	5.13
CRP	123		
ESR	100		
IL-6	59.7	12.2	169.9
GFR	117		
LDH	438		

Case 2



- 50 year old male patient admitted 18/07/2020
- Known RVD+VE on TDF,3TC & EFV since 2011. Immune competent with a CD4 = 343 and virally suppressed <40; blood done 10/02/2020, fully compliant, BMI >35
- GFR =18 :Changed Art ,Dumiva +LPV/r
- Previous Pulmonary TB completed Rx in 2011 with 'cured' outcome.
- Presented with SpO2 99%; BP 133/77; P 130; RR18; T36.4.
- 19/07/2020: SpO2 89%; rebreather mask, RR 25.
- 21/07/20: SpO2 92-93%; RR 30; placed on high-flow O2 at 60l/min-O2 sat 96-99%.
- 22/07/20: Acetamera 400mg IVI, interferon 30ug imi stat alternative 3 days
- 14/09/20 –Abnormal gait limping right foot
- ?DVT ,Gout
- X-ray RT foot lytic lesions of the cuboid bones ?Osteosarcoma
- BiopsyCHEST X-ray clear ,Sputum TB PCR NEG

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	BLOOD TESTS	18/07/ 2020	21/07/ 2020	22/07/ 2020	26/07/ 2020	29/07/ 2020	31/07/ 2020	06/08/ 2020	14/ 202
	WCC	5.28							
	Neutrophils	3.47							
- 7	Platelets	146							
	D-dimer			0.54 H					
	CRP	86 H		130 *H	3				
	IL-6	11.9 H		1041.6 *H	18.8 H	11.4.0 H	81.1 H	48.2 H	
	GFR	18 *L	74 L	59 L	70 L				92 [
•	LDH	2194 *H		354 H					
	URATE								0.59
	RF								<15

CASE 2



- 40 year old male ,newly diagnosed HIV ,CD4 count 12 ,Viral log =6.58, Emaciated ,Weight loss >10%
 Oral thrush ,generalized Lymphadenopathy
- Urine LAM test –Positive =19/07/20
- Chest X-ray –Left lower lobe consolidation
- TB PCR test –negative
- Iron studies –Iron =12.9 normal ,Transferrin 1.4 *L,
 Ferritin 1800 *H

BLOOD TESTS	12/07/20	20/07/20	24/07/20	28/07/20
НВ	8.2	9.6		
MCV	80.4	92.4		
Lymphocyt es	3.76			
Platelets	252	147	188	
ALT				
AST				
D-dimer		4.38	4.65	
CRP	122	147		
ESR				
IL-6	8.7	162.1	493.7	24 H
GFR	24*L	37 *L	50 *L	110
LDH				



WE ARE STRONGER THAN COVID-19

TOGETHER WE SHALL ENDEVOUR TO DO OUR BEST AND STAND TOGETHER

HARD WORK AND DETERMINATION