SOUTHERN AFRICAN HIV CLINICIANS SOCIETY

ART Resistance, management of patients on second-line therapy, third line principles

Southern African HIV Clinicians Society Guidelines for ART in Adults: 2023 update Masterclass

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Introduction

- ART is the cornerstone of HIV management transforming HIV from a fatal disease to a manageable chronic disease.
- We need to protect our current regimens and be vigilant against the development of ART resistance.
- ART resistance may result in limited treatment options, use of limited resources to diagnose resistance, use of toxic drugs etc. In essence ART Resistance is a major threat to HIV treatment success.
- The consequences of ART resistance are dire: Treatment failure, Disease progression, Increased morbidity and mortality, and reduced quality of life.
- Public Health consequences may include; Increased transmission risk of HIV, Resurgence of Epidemic, Negative economic impact, Low life expectancy etc.
- Current strategies to prevent ART Resistance include: ART optimization, ART guidelines for HCWs monitoring VL, improving adherence to ART, use of patient friendly regimens, guidelines om Virological failure, resistance testing, third line committee etc.

ART RESISTANCE Vs VIROLOGICAL FAILURE

- In ART Resistance there is HIV mutations that result in reduced ARV effectiveness.
- ART Resistance can occur due to virological failure, inadequate treatment or transmission.
- Virological failure is persistent detectable VL (≥ 1000 copies/mL)
- Virological failure indicates treatment nonadherence, poor absorption, or resistance.
- For patients requiring a protease inhibitor (PI), recommendation for darunavir as the PI of choice, and for lopinavir/ritonavir to only be considered where PI is required to be coadministered with rifampicin-based TB treatment.

DTG as Second Line Regimen

- All patients on TEE, ABC/3TC/EFV(or NVP), AZT/3TC/DTG are switched to TLD irrespective of VL.
- Any patient on the LPV/r or ATV/r regimen for less than 2 years are switched to TLD irrespective of VL.
- Any patient on the LPV/r or ATV/r regimen for more than 2 years are switched to TLD only if VL < 1000copies/mL
- Any patient on the LPV/r or ATV/r regimen for more than 2 years, VL > 1000 copies/mL but adherence less than 80%, switch to TLD.
- Patients failing 2 NRTI + DTG in first line: 2 NNRTI + DRV/r (after resistance testing confirms DTG resistance).

Resistance testing before switching LPV/r or ATV/r

- All patients on on the LPV/r or ATV/r regimen for more than 2 years, with 2 or more consecutive VL greater or equal to 1000 copies/mL, and adherence is more than 80% meet the definition of a confirmed Virological Failure.
- These patients need resistance testing, and the results discussed with an HIV expert
- Resources: MIC Hotline- 0800 212 506, Right to Care- 082 957 6698, SMS Please Call ME- 071 840 1572
- Patients will be provided individualised regimen as recommended by an HIV expert.

Managing unsuppressed VL in Second Line Regimen:

- In a patient who has been on a second line regimen for more than 2 years, if there are 2 or 3 VLs > 1000 copies/mL in a 6 months period despite adherence interventions, and adherence has been assessed to satisfactory (100% pharmacy visits in the past 6 months, attendance of of > 80% of scheduled clinic visits in the past 6 months), then a resistance test should be done.
- In a patient who has been on a second line regimen for less than 2 years, resistance testing is not required, as it is unlikely a resistance to a PI or DTG would have developed within 2 years. Rather provide adherence support

DECIDING TO SWITCH TO THIRD LINE :

- There should be a documented PI or DTG resistance before switching to a third line regimen.
- Patients who fail LPV/r or ATV/r second line regimen with low -, intermediate -, or high- level resistance to the PIs (Stanford score > 14) should be switched to TLD PROVIDED DRV is fully susceptible and there has not been prior exposure to DTG.
- Patients who fail a DTG second-line regimen and are found to have DTG resistance should be initiated on TDF + 3TC + DRV/r (If there is a PI resistance or strongly suspected to have archived PI resistance, the treatment plan must be discussed with an HIV expert as they may require an additional drugs).

Patients currently on third–line therapy:

- Given the efficacy of TLD with compromised NRTIs, it may be possible to simplify the regimens of certain patients on 3rd line regimen to improve adherence.
- This should be done with after careful review of treatment history and all genotype results with an HIV expert.
- If the regimen is simplified to TLD, It must be ensured that that a follow-on-regimen is still available should the regimen fail and DTG resistance develops.
- This requires DRV/ to be fully susceptible (Stanford score = 0)

THE END!

THANK YOU FOR YOUR ATTENTION

QUESTIONS/INPUTS