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Our Issues, Our Drugs, Our Patients

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Abstract ID: 190 Third-Line Antiretroviral Treatment (ART) in Children with HIV: Case Reports from a Paediatric Treatment Failure Clinic in Khayelitsha, South Africa

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Background:



- HIV treatment failure rates in children high in studies:
 - IeDEA Study*: 19.3% after 3 years of treatment
 - Ubuntu Clinic in Khayelitsha, South Africa failure rate almost 30%



*Virologic Failure and Second-Line Antiretroviral Therapy in Children in South Africa—The IeDEA Southern Africa Collaboration. Davies, Mary-Ann et al. JAIDS March 2011, Volume 56 - Issue 3 - pp 270-278



Background:



- July 2013: MSF started the Paediatric Risk of Treatment Failure clinic in Khayelitsha, South Africa
 - 0-19 year old children failing ART
 - Addresses adherence issues to promote re-suppression
- Tools used:
 - Individual counseling
 - Support groups / Adolescent "Teen" clubs
 - Home visits



- Most children have re-suppressed their viral load:
 - Of those in clinic for at least 6 months, 89/114 (74%) have re-suppressed
- 4/72 (5%) of those enrolled on protease inhibitors have shown resistance necessitating 3rd line ART



Methods:



3 months standard adherence counseling by nurse



Persistent VL > 1000 HIV copies/ml



Genotype shows resistance to lopinavir/ritonavir



Switch to third line regimen after adherence addressed



Ongoing adherence counseling/Obtain VL every 3 months

Results:

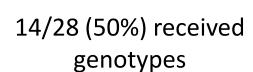


72 patients enrolled on PI-Based regimens



44 (61%) re-suppressed with 3 months adherence support

28 (39%) not suppressed



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14/28 (50%) no genotype obtained (lost from care, transfer, VL improved but still >400)

4/14 (28%) resistance to lopinavir/ritonavir (resistance scoring range 30-115)



4/72 patients (5%) started on 3rd line ART



Results (continued):



- Data of Patients on 3rd line ART:
 - Mean age 6.64 years
 - 4/4 (100%) with a history of TB
 - Mean time on 3TC monotherapy before starting 3rd line ART:
 23.2 months (range 7-47 months)
 - Mean decline in CD4 count from start of 3TC monotherapy to start of 3rd Line ART: 35.5% (range 21% - 48%)

Results (continued):



- 3rd Line Regimens based on genotype results:
 - 2/4 started on darunavir/ritonavir/raltegravir/3TC/AZT
 - 2/4 started on darunavir/ritonavir/3TC/AZT
- Viral load results:
 - 4/4 VL <400 copies/ml around 3 months after starting
 - 3/4 VL <400 copies/ml around 6 months after starting (4th patient VL 418)
- No side effects or adverse clinical developments reported
- No adherence problems reported

Conclusions:



- Lopinavir/ritonavir regimens are robust
 - Few patients develop resistance despite prolonged viremia
- Excellent and rapid efficacy of darunavir/r and raltegravir
- No side effects reported with 3rd line regimens.
- Thorough adherence counseling necessary for 3rd line ART initiation and maintenance.
- It is possible to identify PI-resistant children and to start them successfully on 3rd line ART at PHC level!
- Administration of 3rd line ART is complex!
 - Urgent need for less complex, more tolerable paediatric drug formulations and regimens









Thanks! Questions?

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