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Associations Between Experienced HIV Stigma, Resulting Consequences, and the HIV Care: A case report

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Abstract

This study looks back at a 19-year-old female patient who tested positive for HIV. The subject's parents are HIV positive, and mother to child vertical transmission is the mode of transfer. When she was three years old, her mother passed away. At three years old, the subject was placed in an orphanage. She wants to become adept at coexisting with her father. No previous experience in psychiatry. Not getting enough sleep Taking care of oneself, being functioning, bleeding nose, and hunger. Suspicion, continuous depression, hearing voices, thoughts of suicide. She is on ART with the combination of TLD regimen. She started taking antiretroviral therapy (ART) in 2008 with the combination of ZLN regimen. The incidence of these neurocognitive disorders is augmented among People Living with HIV (PLWH); the physical ramifications of stress increase the likelihood of HIV acquisition, pathogenesis, and treatment, as both stress and HIV infection are characterised by chronic inflammation, which creates a more opportunistic environment for HIV. The impact of chronic stress exposure and the origin of individual variation in stress responses and resilience are at least in part attributable to regions outside the primary stress circuitry, including the amygdala, prefrontal cortex, and hippocampus.

Keywords: HIV-1, Stress, Cognition, Neuropsychiatric disorders, Vgrade, HIV Comorbidities

Introduction

In 2020, adolescents accounted for 11% of new infections and 5% of AIDS-related deaths globally ^[1]. Nevertheless, advances had been made pre-COVID-19 pandemic in the control and prevention of HIV yet adolescents still presented poor HIV treatment outcomes ^[2]. Children and adolescents with HIV/AIDS are living well beyond the life expectancy that was projected for them in the past. As the number of survivors of vertically or transfusion associated paediatric HIV disease increases, attention to the psychosocial adjustment of these adolescents and young adults becomes increasingly important. Studies in the late 1990s described child and adolescent survivors as generally well adjusted, though difficulties become more apparent as the child approached the age of 18.



Source: <https://www.mrmed.in/medicines/acriptega-tablet>

TLD is a fixed-dose combination of TDF 300 mg, 3TC 300 mg, and DTG 50 mg. TLD is also recommended for use as a second-line regimen for patients failing on efavirenz- or nevirapine-containing regimens or for those failing a non-DTG-containing first-line regimen.

Side Effects of TLD combination drug regimen

Side effects are unwanted symptoms caused by medicines. Even though all drugs cause side effects, not everyone gets them.

Serious:

- Rapid breathing
- Drowsiness
- Nausea, vomiting, and stomach pain
- Severe allergic reactions
- Severe mood disturbances, depression, and suicidal thoughts
- Confusion, forgetfulness, seizures, and tremor
- Liver toxicity (yellow skin, dark urine, light-colored skin)
- Kidney damage

Case Report

A 19-year-old HIV-positive subject is studying a Multi-Purpose Health Nurse course. The subject's parents are HIV positive, and mother to child vertical transmission is the mode of transfer. When she was three years old, her mother passed away. At three years old, the subject was placed in an orphanage. She wants to become adept at coexisting with her father. She is admitted to the hospital for psychiatry counselling. No previous experience in psychiatry. Not getting enough sleep Taking care of oneself, being functioning, bleeding nose, and hunger. Suspicion, continuous depression, hearing voices, thoughts of suicide. She is on ART with the combination of TLD regimen.

→ Patient is an orphan → History noted
 → Was brought to the → from care taker.
 orphanage when she → Behavioral problems
 was 3-4 yrs old → 6-7 months.
 → She wants to
 Physical Examination: find + live with → K1C10 → ~~also~~ ~~also~~ ~~also~~
 her father. RVD (on TLD regimen)
 → No past history of psychiatric consultation.
 → Slap Appetite ⊕ ⊕ Bowel + Bladder function ⊕ ⊕
 Provisional / Final Diagnosis :
 → No self care + functionality maintained
 → No 4/0 obsessive Sadness / suicidal thoughts / hearing of voices
 Insidiousness / Obsession.

Figure 1: Clinical summary of the subject

Nutritional Assessment: Administered Standard Progressive Matrices. Scores								
Immunitisation:	Obtained Score 8 5 4 7 1							
Investigations:	Expected Score 7 6 5 4 1							
MV	Discrepancy -1 -1 -1 3 0							
CBP	Total Score 25							
TS4	Time taken 40 min							
4. measure	Percentile: Below 5th Percentile							
S. Bilirubin	Grade: V (Intellectually impaired)							
CF Bile								
Medication Advice: (*Please use capital letters only)								
S.No	Drug Name	Dose	Morning	Afternoon	Evening	Night	Duration	Route
	Psychomedication provided to the caretaker.							

Figure 1: Applied typical progressive matrices. Scores that show the patient is intellectually disabled, V grade.

Discussion

Stress history is an important consideration when examining HIV acquisition, as evidenced by the substantial overlap in risk factors for stress and increased likelihood of HIV infection. Even with antiretroviral therapy (ART) and other treatments to decrease the transmission of HIV, HIV infections remain rampant, with 1.7 million new infections in 2018, and 37.9 million PLWH globally. Similar to the impact of chronic stress, HIV disproportionately impacts populations that have traditionally suffered from health disparities, including minority populations and those of lower socioeconomic status [3,4,5]. Pragmatic interventions that enhance coping with adversity and provide emotional/instrumental support should be tested for effectiveness in promoting resilient psychosocial adjustment trajectory in vulnerable children. Participants aged 18 years and older were less likely to complete their academic education than their healthy peers (national norms). Adolescents who lost a parent were more likely to have suffered from depression during their lifetime.

Antiretroviral treatment can prevent and control HIV transmission by suppressing the amount of virus in the blood plasma even without eliminating the virus from the body [6, 7]. To maintain viral suppression, people living with HIV must take antiretroviral drugs for a long life

through Highly active antiretroviral therapy (HAART). People living with HIV who undergo antiretroviral therapy through HAART are proven to have a better quality of life ^[8]. However, despite the benefits of antiretroviral therapy, people living with HIV face problems that arise due to undergoing HAART such as drug effects ^[9]. Generally, the side effects of antiretroviral drugs are central nervous system disorders, gastrointestinal system disorders, as well as skin and subcutaneous tissue disorders ^[10]. According to a previous study in Tanzania, Uganda, and Zambia, the presence of drug side effects is the most common reason for people living with HIV to forget to take antiretroviral ^[11]. In addition, other problems arise from the use of HAART in the form of a multi-tablet regimen that people living with HIV must take every day ^[12]. The combination of antiretroviral drugs in the form of a multi-tablet regimen makes people living with HIV feel dissatisfied with their HIV medication ^[13]. Drugs' side effects and the combination of multi-tablet regimens may lead people living with HIV to not comply with their therapy, and even the worst to stop taking antiretroviral drugs ^[14, 15]. Finally, low adherence to therapy potentially causes therapy failure and drug resistance ^[16].

Women were more prone to suffer from drug side effects than men because of differences in hormone, pharmacodynamics, and pharmacokinetics. In addition, women's lifestyle and psychosocial factors such as diet, and taking more medication causes a higher chance of experiencing drug-drug interactions and side effects. The pharmacodynamics differences between men and women include differences in the drug target, membrane transport, receptor binding, receptor number, and interactions with macromolecules. While the differences in pharmacokinetics include differences in metabolism, body composition such as fat and organ blood flow, and bioavailability due to gastrointestinal mobility and absorption. Women's cells are more sensitive to drug exposure than men's ^[17].

Conclusion

Social support and honest communication regarding the diagnosis are crucial, especially at a time when adolescent growth and individuation are centred on decisions about relationships, sexual activity, drug use, and future plans. HIV-positive youngsters have a higher chance of surviving into puberty and beyond thanks to advancements in medical care. Because of this, their psychosocial requirements are shifting from those of the terminally ill to those of a person who is chronically ill. Families with children living with HIV/AIDS should give careful thought to becoming self-sufficient.

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