



SEXUALLY TRANSMITTED INFECTIONS, HIV/AIDS

DERMATOLOGICAL MANIFESTATIONS OF HIV IMMUNE RECONSTITUTION SYNDROME (IRS): A PROSPECTIVE COHORT STUDY

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Introduction: IRS occurs from restored immunity to infectious and non-infectious antigens. Estimates suggest that IRS affects 10-25% of adults commenced on anti-retroviral therapy (ART). Skin is the most commonly affected organ accounting for 51-78% of IRS-associated conditions.

Objectives:

- To determine the prevalence of skin diseases related to IRS
- To determine whether IRS-related skin diseases arise de novo ('unmasking' IRS event) or are a paradoxical worsening ('paradoxical' IRS event).
- To identify risk factors for the development of IRS-related dermatological event.

Methodology: An observational, prospective cohort study on patients who are newly commenced on ART at the adult HIV department at ALERT hospital, Addis Ababa, Ethiopia from March 2013 – March 2015. Participants were followed with clinical evaluation and CD4 count for 6 months to a year. Viral load done only if treatment failure was suspected. However, to evaluate the association between occurrence of IRS and viral load, VL was done for 21 IRS and 28 controls.

Results: Among the 187 recruited, 25 were excluded and 161 patients followed. Sixty participants (39.8%) developed 80 dermatologic IRS events (multiple IRS in some), 3 had treatment failure and 8 developed drug reaction. 81.3% and 42.5% of the IRS occurred in the first 6 months and 6 weeks period after initiation of ART respectively. Unusual cases like acne vulgaris, rosacea, different eczema and urticaria were seen as IRS. Low CD4 count and high viral load were found to be significantly associated with the occurrence of IRS ($p < 0.05$).

Conclusion:





- Most IRS occur in the first 6 months after commencement of ART.
- Low CD4 count and high viral load were risk factors for IRS. Hence, starting ART early and close follow up is recommended.

