

Syphilitic Skin Rash:A Case Report

Nisha Dharamdasani,M.D.,Faizan.A.Master,M.D.,Mustafa Alaziz,M.D.,Anil Gulati,M.D.,Syed Ala,M.D.

Mount Sinai Hospital Medical Center Of Chicago/Jackson Park Hospital Family Medicine Residency Program.

Background

- Syphilis infection involves three stages: primary, secondary, and tertiary. Neurosyphilis can manifest during any of the three stages and is due to the invasion of *T. Pallidum* into the central nervous system or peripheral nerves.

Clinical Presentation

- 36-year-old transgender female with a past medical history of HIV/AIDS presented to the ED with left sided weakness of 24 hour duration.
- Patient had experienced unsteady gait due to HIV related peripheral neuropathy for the last couple of years. Patient has been treated with biktarvy though patient has been noncompliant with medical care.
- Physical examination was significant for fluctuating lethargy, slow speech with left hemiplegia. She also had preexisting mild degree of bilateral weakness likely secondary to peripheral neuropathy. The patient was noted to have discrete scaly maculopapular/ papulosquamous rash and plaques on bilateral palms and soles. The rash was painless and asymptomatic.
- CT head showed chronic ischemic changes and an acute left subcortical ischemic lesion suggestive of stroke. The typical appearance of the rash was suggestive of syphilitic rash and further diagnostic work up confirmed including the CSF examination established the the diagnosis of Neurosyphilis.
- The patient was treated appropriately During hospital stay and subsequently discharged to a skilled nursing facility.



Before Treatment



After Treatment



Discussion

- Syphilis is more common in patients with HIV/AIDS than the general population and the incidence of neurosyphilis is even greater in this subgroup of patients, manifesting much earlier in course of the illness. Neurosyphilis involves the invasion of *T.pallidum* into the brain, spinal cord, and peripheral nerves.
- Neurosyphilis does manifest with various neurological symptoms including dementia, psychiatric symptoms, meningitis and CNS vasculitis including stroke at young age. The Syphilitic Rash has certain unique feature, typically being painless and asymptomatic and present at the palms, soles and at the trunk.
- The presence of skin rash, typical of syphilis, "Syphilitic Rash", led to the diagnosis of Neurosyphilis in this patient.

Conclusion

- As per CDC, reported syphilis cases increased 80% in the United States between 2018 and 2022.
- Family Physicians should remain vigilant to diagnose neurosyphilis in HIV patients, in particular, if there is a neurological symptom.
- Spinal tap with CSF analysis is an essential step in the diagnosis of neurosyphilis and it should be considered even in asymptomatic HIV patient with syphilis who are at increased risk of neurosyphilis.

References

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