Clinical Image of Shingles

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Images in Medicine

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Shingles, clinically referred to as Herpes Zoster, is a viral dermatological condition that arises from the Varicella Zoster Virus (VZV). Following a prior varicella infection, this virus persists in an inactive state within the sensory ganglia associated with the cranial nerve or the dorsal root ganglia [1].

A 52-year-old male patient diagnosed with insulin-dependent diabetes mellitus for eight years presented with symptoms characterised by recurrent stinging, pain, and itching associated with blisters on his right arm and shoulder for one year. It reoccurred five times throughout one year and on the same site i.e., shoulder and right arm [Table/Fig-1]. Upon examination, clusters of confluent vesicles were identified on the right arm and scapular region. This clinical presentation led to a diagnosis of herpes zoster. The clinical image can assist in the differential diagnosis of conditions such as herpes simplex virus infections, autoimmune blistering disorders, impetigo, insect bites, and herpes zoster, among others. The Tzanck test was done which was suggestive of the presence of multinucleated giant cells with marginated chromatin, acantholytic cells were noted. Ballooning degeneration of keratinocytes were seen. No bacteria or fungal elements were observed. Findings were suggestive of VZV (Shingles). The medications given to patient were Tab. Acyclovir 400 mg TDS, Tab. Aceclo SP BD, Tab Pan 40 mg OD for five days and Zoster ointment for local application.



[Table/Fig-1]: Clusters of vesicles on the right arm and scapular region.

The VZV is the causative agent of a painful dermatomal rash that typically resolves on its own. This rash is marked by clusters of herpetiform vesicles set against a red, inflammed background. The condition occurs when the immune system is unable to suppress the virus's latent replication. A relationship has been established between an individual's immune status and the frequency of this infection [2]. Herpes zoster is commonly seen in individuals who are 50 years of age and older, although it can occur at any age. Most people tend to experience only one episode of this condition during their lifetime; however, there is a possibility for multiple episodes to occur [3].

In India, the annual incidence of shingles is estimated at around one million cases, translating to a rate of 705 cases per million individuals, or seven cases per 10,000 people each year. This condition is projected to affect between 20 to 30 percent of the population at various points in their lives, with approximately 50% of those aged 80 years and older having shingles [4].

Individuals diagnosed with shingles generally exhibit one or more vesicular lesions, primarily localised to one side of the body or face, typically restricted to a limited area. The most common presentation occurs as a band-like arrangement encircling one side of the torso. The resulting rashes usually correspond to the distribution of nerves within the skin, a concept known as a dermatome. Although shingles are frequently seen on the chest and back, it can also involve the upper and lower extremities. Notably, shingles are not contagious to others, and recurrences are most prevalent among individuals with compromised immune systems [5].

Upon reactivation, the virus replicates within the neuronal cell bodies, resulting in the release of virions that migrate along the nerve pathways to the specific skin area innervated by the affected ganglion. In the dermis, the virus triggers localised inflammation and the development of blisters. The pain experienced in zoster is linked to the inflammatory response occurring in the nerves affected by the virus [6].

Antiviral therapy significantly enhances the recovery of lesions, reduces acute pain, and is essential in mitigating the risk of postherpetic neuralgia, especially in the elderly population. The antiviral medications utilised in the treatment of herpes zoster consist of acyclovir, prescribed at a dosage of 800 mg five times a day for five days; valacyclovir, administered at 1 gram three times daily for five days; and famciclovir, given at 500 mg three times a day for a week [7].

The case of the 52-year-old male patient illustrates the clinical presentation and management of herpes zoster or shingles, emphasising the importance of recognising the condition's characteristic vesicular rash and the role of antiviral therapy in alleviating symptoms and preventing complications, particularly in immunocompromised individuals.

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