



Current Knowledge of Chickenpox

Iftikhar M¹, Enerijiofi KE², Akram M^{1*}, Rangasamy S³, Garcia-Sierra F⁴, Hasibuzzaman MA⁵, Ozdemir FA⁶, Sołowski G⁶, Fitria N⁷, Altable M⁸ and Sfera A⁹

¹Department of Eastern Medicine, Government College University Faisalabad-Pakistan

²Department of Biological Sciences, Glorious Vision University, Ogwa, Nigeria

³Department of Community Medicine, Sri Venkateshwara Medical College Hospital & Research Centre (SVMCH&RC), India

⁴Department of Cell Biology, Center of Research and Advanced Studies of the National Polytechnical Institute, Mexico

⁵Department of Nutrition and Food Science, University of Dhaka, Bangladesh

⁶Department of Molecular Biology and Genetics, Faculty of Science and Art, Bingol University, Turkey

⁷Department of Pharmacology and Clinical Pharmacy, Universitas Andalas, Indonesia

⁸Department of Neurology, Neuroceuta, (Virgen de Africa Clinic), Spain

⁹Department of Psychiatry, Patton State Hospital, USA

***Corresponding author:** Muhammad Akram, Department of Eastern Medicine, Government College University Faisalabad, Pakistan, Email: makram0451@hotmail.com

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Abstract

The varicella zoster virus (VZV) infection that causes chickenpox can be dangerous for adults, babies, and immunocompromised individuals. In ganglion neurons, latency follows primary infection. There is no visible neuronal damage and no production of virus particles during this time. When the virus reactivates, it replicates and generates zoster (shingles) in the tissues that the implicated neurons innervate. This process also results in inflammation and cell death, which can induce persistent radicular pain (postherpetic neuralgia). Postherpetic neuralgia has an unclear etiology and is challenging to manage. Furthermore, meningitis, myelitis, cranial nerve palsies, stroke (vasculopathy), retinitis, and gastroenterologic infections such as ulcers, pancreatitis, and hepatitis might arise as consequences of zoster. The only human herpesvirus for which extremely effective vaccinations are available is VZV.

Keywords: Chickenpox Varicella; Water pox; Germ pox

Introduction

Due to the varicella-zoster virus, chicken pox is a highly contagious illness. A low temperature and an itchy rash are frequently the first signs. Small red pimples on the back or stomach first appear before the eruption extending to the limbs and face. They blister, leak, and eventually crust

over quite quickly. According to Leung [1], people may have few lumps or many lumps covering them. The cause of chickenpox is the varicella-zoster virus (VZV), a herpes virus. It is contracted by breathing in virus-filled aerosols produced by the respiratory secretions of patients who were incubated for the longest. Classic lesions that resemble a drop of dew on a rose petal or an "oval tear on an erythematous

base" first occur. These lesions are indicative of the disease [2-4]. Beginning as red spots, skin lesions spread over the face and trunk over the course of 12 to 14 days, eventually taking the form of papular, vesicular, pustular, and finally, scabs. With the distal lesions largely preserved, the lesions are concentrated in the middle regions of the skin and the proximal upper cutaneous extremities. The varicella-zoster virus (VZV), a herpesvirus, is the culprit behind chickenpox. It is easily spread from person to person by direct contact with an infected person's rash or breathing droplets. The virus that caused chickenpox stays dormant in the body's nerve cells after the original infection and can reawaken later in life to create shingles (herpes zoster). The varicella-zoster virus (VZV), which causes chickenpox, is a common viral infection that can happen anywhere in the world. Prior to the implementation of regular immunization campaigns, practically everyone had experienced chickenpox at some point in their childhood. The peak period for chickenpox in temperate areas typically occurs in late winter or early spring. Children are the main victims of the virus, but adults who have never been exposed to it or received no vaccinations are also at risk. There has been a notable decline in the incidence of chickenpox in areas with high immunization rates. Nonetheless, outbreaks may still happen in areas with lower immunization rates or among individuals who lack all recommended vaccinations. In order to prevent and manage the spread of this infectious disease, public health initiatives must take into account the epidemiology of chickenpox [3].

Mode of Transmission

The main way that chickenpox is spread is by direct contact with an infected person's rash or respiratory droplets. Little droplets containing the varicella-zoster virus (VZV) can be released into the air and inhaled by those in close proximity when a person suffering from chickenpox coughs or sneezes. Similar to this, you can get infected by touching the fluid from an infected person's blisters, which can then travel to your hands and infect your mouth, nose, or eyes. People are most contagious a day or two before the rash starts and until all of the blisters have scabbed over. The virus is very contagious. Usually, this infectious phase lasts for five to seven days after the rash first appears. Due to its ease of transmission, chickenpox can spread quickly in places where close contact is common, like homes, daycare centers, and schools. Chickenpox cannot spread if affected individuals are not promptly isolated and hygienic measures, like frequent hand washing, are followed [5]. In most cases, symptoms start to show up 14 to 16 days after exposure, although they can sometimes show up as early as 10 days or as late as 21 days. The typical look of skin rashes is frequently used to diagnose shingles and chickenpox [6]. There is a range of 10 to 21 days, on average, between being exposed to symptoms and getting chickenpox. The usual gap is 14 to 16 days [7].

Doctors typically use the rash to diagnose chickenpox. Lab testing, such as blood tests or lesion sample cultures, can be used to confirm the diagnosis of chicken pox if there is any uncertainty [8].

Treatment

Usually, therapy for chickenpox is not necessary. For itching relief, a doctor might recommend an antihistamine. However, in the majority of instances, Tylenol (acetaminophen) can help ease the symptoms of chickenpox by lowering discomfort and fever [9,10,2]. Symptomatic alleviation is the goal of treatment. Generally speaking, those who are infected should stay at home during their infection as a precaution. Wearing gloves and cutting short nails helps stop scratches and lower the chance of developing secondary infections. Put on calamine lotion to ease itching. Provide sugar-free popsicles to alleviate mouth sores; take oatmeal baths to relieve and calm itching; wear gloves to prevent scratches; take baking soda baths to relieve itching; apply chamomile to soothe itching in regions affected by chickenpox [11]. Administer authorized analgesics (for fever and discomfort resulting from chickenpox blisters), Put on calamine lotion to ease itching. Serve sugar-free popsicles to ease mouth sores; use oatmeal baths to soothe and alleviate itching [12] Using chamomile (which helps itching in chickenpox areas), taking baking soda baths (which reduce itching), donning gloves (which prevents scratching), and giving out prescription painkillers (for chickenpox blister pain and fever) [13-15].

Conclusion

To avoid transmission, isolate affected individuals until all lesions have healed. The goal of vaccination campaigns is to lessen illness overall. In conclusion, chickenpox is a frequent pediatric illness that, while often mild, can have significant consequences in certain groups. Its incidence and severity have been greatly decreased in many parts of the world by vaccination.

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