Severe Varicella Pneumonia in an Immunocompetent Adult

Tuğba Demirel Güğül, Zeynep Türe, İlhami Çelik

A 38-year-old man was admitted to our clinic with complaints of fever, right-side pain, shortness of breath, cough, white sputum, and rash. He reported that lesions appeared on the trunk and spread throughout the body over a period of 4 days. His medical history showed 20 packets/year of smoking. Physical examination revealed high fever (39°C), tachycardia (118/min), and tachypnea (30/min). The eyelids of the patients were edematous, and the oropharynx and tonsils were swollen and red. There were maculopapular and vesicular lesions on the whole body. Varicella zoster immunoglobulin (Ig) M and IgG were positive according to serological tests. Bilateral, widespread, interstitial infiltrations were observed on chest X-ray (Fig. 1). Intravenous acyclovir (3x10 mg/kg) therapy was initiated. On day 2, the patient was transferred to the intensive care unit with low oxygen saturation (70%) and the need for non-invasive mechanical ventilation. On day 4 of treatment, vesicular lesions began to dry. The patient was discharged on day 10 of acyclovir treatment with completely dried vesicular lesions.

Pneumonia is an uncommon complication of chickenpox, more frequent in older teenagers and adults than in children (1). In our country, seropositivity rates are high among adults, ranging from 88.4% to 99% (2). Risk factors for varicella pneumonia include immunosuppression, pregnancy, heavy smoking, older age, and chronic obstructive pulmonary disease (3). The patient was immunocompetent but was a heavy smoker and hence was predisposed to pneumonia. Depending on severity, 7–10 days of oral or intravenous acyclovir treatment is the first-line therapy. Valacyclovir, famciclovir, brivudin, and foscarnet can be used depending on the patient’s clinical and metabolic status (3). The use of steroids for severe infections is controversial, and it requires further investigation (3). Nearly 40% of patients with Varicella zoster virus pneumonia require mechanical ventilation, and mortality rate is approximately 10% in adults with any co-morbid conditions (1, 3). The image of varicella zoster virus pneumonia is presented here. Early initiation of appropriate antiviral therapy and close monitoring are important to prevent the need for mechanical ventilation.

Informed Consent: Verbally and written informed consent was obtained from patients who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Conceived and designed the experiments or case: TDG, ZT, İÇ. Performed the experiments or case: TDG, ZT. Analyzed the data: TDG, ZT, İÇ. Wrote the paper: TDG, ZT, İÇ. All authors have read and approved the final manuscript.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.
REFERENCES