

GENERALISED FORM OF HERPES ZOSTER. CLINICAL CASE.

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Abstract

This clinical report describes a rare course of herpes zoster – the generalized form of the disease. The severe and disseminated progression developed against the background of pronounced immunosuppression caused by the presence of multiple myeloma in the patient. Timely initiation of antiviral and symptomatic therapy led to regression of clinical manifestations and helped prevent the development of severe complications. This clinical case once again emphasizes the importance of early diagnosis and comprehensive treatment of herpes zoster in patients with immunosuppressive conditions.

Keywords

Varicella zoster, herpes zoster, immunosuppression, multiple myeloma.

Herpes zoster is a viral disease that develops as a result of reactivation of the Varicella zoster virus, characterised by acute inflammation of the peripheral nerve ganglia and skin, as well as the appearance of painful vesicular rashes located asymmetrically along the nerves.

The Varicella zoster virus (VZV) is a highly contagious virus belonging to the herpesvirus family that causes two clinical diseases: chickenpox, which usually develops in childhood, and shingles, which usually occurs later in adulthood.

The virus enters the body through the upper respiratory tract or conjunctiva. After primary infection, VZV remains dormant in the nerve ganglia and can reactivate later, leading to the development of shingles (HS).

Patients with immunosuppression are 20 times more likely to develop herpes zoster than individuals of the same age with normal immune status.

Shingles can be an early clinical manifestation of HIV infection, indicating the initial stages of immunodeficiency.

Myeloma is a cancer of the blood and bone marrow characterised by clonal proliferation of plasma cells in the bone marrow. This pathology is accompanied by excessive production of monoclonal immunoglobulins (M-protein) or their light chains (Bence-Jones protein).

In the pathogenesis of the disease, uncontrolled proliferation of plasma cells suppresses the normal process of haematopoiesis, leading to the development of anaemia, thrombocytopenia and leukopenia. In bone tissue, as a result of increased osteoclast activity and decreased osteoblast function, osteolytic foci form, increased bone fragility and pathological fractures are observed.

In addition, excessively produced monoclonal immunoglobulins accumulate in renal tissue, which can lead to the development of myeloma nephropathy.

The generalised form is characterised by the appearance of vesicular rashes along the nerve trunks in combination with widespread vesicular rashes over the entire surface of the skin. In the presence of severe concomitant diseases (including HIV infection, lymphocytic leukaemia, lymphoma, malignant neoplasms of internal organs), as well as in patients receiving immunosuppressive therapy (cytostatic drugs, corticosteroids, radiation therapy), clinical manifestations may occur at a considerable distance from the affected nerve ganglia. With increasing age of the patient, the likelihood of skin rashes and their prevalence increases.

We present our own clinical observation of generalised herpes zoster. Patient Khalikov Sh., born in 1954, visited the consultative polyclinic of the regional branch of the RSNPMC and DVK in Tashkent on 15 November 2025.

Complaints upon admission:

Rashes on the skin of the chest, abdomen, lumbar region, right shoulder and armpit area, severe pain, mild itching, increased body temperature, general weakness.

Medical history:

The patient considers himself to have been ill for 5 days. The disease began acutely, without any specific cause. He did not treat himself at home. He consulted a dermatologist at the local primary health care centre, where he was diagnosed with chickenpox and prescribed treatment.

Despite treatment, the patient's clinical condition did not improve, and the pain intensified.

The patient has been treated for myeloma for 1 year and is receiving chemotherapy. He is being monitored at the Institute of Haematology and was referred to an infectious disease specialist for consultation.

He then went to Tashkent Clinical Infectious Diseases Hospital (GKIH) No. 1, where he was diagnosed with pyoderma and referred to a dermatologist for consultation.

At the outpatient clinic of the regional branch of the RSNPMC and the Tashkent City Health Department, he was clinically diagnosed with 'generalised herpes zoster' and referred for inpatient treatment.

Anamnesis

vitae

Born in the city of Yangier, Syrdarya region, into a working-class family, the fifth child of his mother. Developed normally for his age. He started school at the age of 7 and completed 10 years of schooling. He has a higher education (technical). He is currently unemployed and retired. He has been sexually active since the age of 26 and is married. This is his first marriage.

Past illnesses: colds, stomach ulcer, myeloma (since September 2024). No hereditary diseases. Denies any harmful habits. Living conditions are satisfactory. Regular and adequate nutrition. Not a donor or recipient. No criminal record. Not registered with the PND.

Status

praesens

The patient's general condition is moderate. Consciousness is clear, posture is passive. Body build is normal, thin. The pharyngeal mucosa is not hyperemic, the tonsils are enlarged. Skin colour is normal, turgor is preserved. No skin appendage pathologies were identified. Peripheral lymph nodes are enlarged. Skin secretion is normal. The musculoskeletal system is without deformities. Percussion of the lungs: pulmonary sound, borders unchanged; auscultation – vesicular breathing, no rales. Heart sounds are clear and rhythmic. Pulse is 80 beats per minute, rhythmic, satisfactory. Blood pressure is 120/80 mm Hg.

Teeth are sanitised, yellow metal crowns are present. Tongue is clean and moist. Abdomen is normal in shape, soft and painless on palpation. Liver is not enlarged. Urination is free and painless. External genitalia are age-appropriate, male type. No acrocyanosis. Thyroid gland is not enlarged. Vision and hearing are not impaired.

Status

localis

The skin process is pathological, widespread, localised on the skin of the chest, abdomen, lumbar region, right shoulder and axillary region.

The lesions are acute and inflammatory in nature, with an erythematous background, ranging in size from 2×3 mm to 5×7 mm, containing clear serous, haemorrhagic or purulent fluid, prone to grouping and merging, and represented by vesicles and pustules. Some vesicles and pustules have ruptured, forming moist erosions and dense haemorrhagic crusts in their place. The rashes are asymmetrically located along the intercostal nerves. On palpation, the lesions are sharply painful.

Symmetrical vesicles up to 2–3 mm in size containing clear serous fluid are noted on the chest and abdomen.

The peripheral lymph nodes are enlarged. No pathology of the skin appendages is detected. Dermographism is red. **Subjectively:** severe pain, mild itching.



Plan for laboratory and functional tests:

In accordance with the Standards of the Ministry of Health of the Republic of Uzbekistan, Order No. 287 of 15 September 2025:

- Complete blood count
- RMP test.
- HIV test.

Laboratory and functional test results:

► Complete blood count

- Haemoglobin (Hb) - 128.0 g/l [reference range: 130-160; adults: 120-140]
- Red blood cells (RBC) - $3.94 \times 10^{12}/L$ [reference range: 4.0-5.0; adults: 3.9-4.7]
- White blood cells (WBC) - $3.71 \times 10^9/L$ [4.0-9.0]
- Segmented neutrophils - 73.2% [47-72]
- Eosinophils - 5% [0.5-5]

- Monocytes - 12.5% [3-11]
- Lymphocytes - 12% [19-37]
- Erythrocyte sedimentation rate (ESR) - 20 mm/h [reference: 2-10; adults: 2-15]

- ▶ HIV blood test - negative (N4 IXA)
- ▶ Plasma micro-reaction (RMP) - plasma negative.

Based on the patient's medical history, clinical examination, and laboratory and instrumental test results, the following diagnosis was made:

Primary: Multiple myeloma and malignant plasma cell neoplasms C90.

Concomitant: Generalised form of herpes zoster B02.

Inpatient treatment. A 10-day treatment plan was drawn up in accordance with the standards of therapy for the generalised form of herpes zoster.

Antiviral therapy:

- Acyclovir tablets 800 mg × 5 times a day, 10 days

Vitamin therapy:

- Ascorbic acid solution 5% – 2.0 ml intramuscularly, No. 10
- Vitamin B12 solution 0.05% – 1.0 ml intramuscularly, No. 10

Non-steroidal anti-inflammatory drugs:

- Diclofenac sodium solution 25 mg/ml, intramuscularly, 5 days

Local treatment:

- Aniline dyes: 5 ml of Fucorcin solution, twice a day
- Antiviral: 5% Acyclovir ointment, 10 g, applied twice a day for 10 days.
- Physiotherapy with ultraviolet irradiation for 10 days

Conclusion. This clinical observation describes a rare variant of herpes zoster – a generalised form of the disease. The severe and widespread course of the disease developed against a background of pronounced immunosuppression caused by the patient's myeloma.

The timely administration of antiviral and symptomatic therapy contributed to the regression of the clinical manifestations of the disease and prevented the development of severe complications. This clinical case highlights the importance of early diagnosis and comprehensive treatment of herpes zoster in patients with immunosuppressive conditions.

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