HERPES ZOSTER WITH WRIST DROP AND ABERRANT LESIONS

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A patient having herpes zoster involving C6, 7, 8, D1 and 2 segments, developed ipsilateral wrist drop and aberrant lesions. Paralytic deformity preceded the skin eruption by one day.

Key words : Herpes zoster, Wrist drop, Aberrant lesions.

Herpes zoster primarily affects the sensory neurones. Rarely, it may involve motor neurones leading to paresis or complete paralysis of the muscles supplied by the affected segment(s).[1,2] Motor affection of the facial nerve, isolated or as part of Ramsay Hunt syndrome is the commonest. Less commonly paralysis of the external ocular muscles as part of the ophthalmic zoster, trunk muscles, diaphragm, bladder and bowel may also occur. Paralysis of limb muscles is uncommon.[1,3] Motor affection of the upper limb was first reported by William Broadbent in 1866.[3] The rarity of motor complications and aberrant lesions in herpes zoster prompted us to report the case.

Case Report

A 21-year-old male developed high grade fever, numbness and neuralgic pain of the left upper limb and weakness of the left hand. In the next 24 hours, he developed painful, grouped papulo-vesicular eruptions over left upper limb and left side of the back. Subsequently, he developed scattered, discrete vesicles over the face, chest, abdomen, thighs and right upper arm. He gave no history of chicken pox in the past. Examination revealed multiple grouped vesicles on an erythematous base over the C6, 7, 8, D1 and 2 dermatomes of left side. There were discrete vesicles lying singly over the face, right side of chest, right upper arm, thighs and abdomen. No pleomorphism of the lesions was seen.

Neurological examination showed left wrist drop with power grade I/V in extensors and grade IV/V in flexors of the wrist. There was hyperaesthesia over the left C6, 7, 8, dermatomes with hyperasthesia over the dorsum of the thumb and index finger and anaesthesia over distal segments of these two digits.

Routine hematological and biochemical investigations were normal. Tzanck smear was consistent with the diagnosis of herpes zoster. EMG studies showed fibrillation and fasciculation potentials over the extensor muscles of the left forearm but normal potentials over the triceps. No sensory or motor conduction could be recorded over the radial nerve below the spiral groove. The findings were suggestive of complete degeneration of the radial nerve trunk at the spiral groove.

The case was managed symptomatically and with splint and physiotherapy. No steroids were administered. All lesions healed within 7-8 days without subsequent crops of lesions. After six weeks of therapy, power in the wrist flexors returned to grade V, but weakness of the extensors persisted. There was no change in the cutaneous sensory loss.

Comments

Herpetic neuritis is a well known entity but motor involvement of the limb is uncommon. The motor involvement may either precede or follow the cutaneous eruption by a few days.[4] The eruption and paresis occur in the same

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segments in over 90% cases but may occasionally occur in adjoining segments or even on the opposite side of the body.[3,5] EMG studies show denervation fibrillation and reduced active motor potentials which may be polyphasic and of low amplitude. Slowing of nerve conduction velocities has also been reported.[6] Herpetic mononeuropathy with nerve trunk involvement is known to occur but is very rare.[7] Affection of the radial nerve at the spiral groove due to herpes zoster has not so far been reported.

Aberrant lesions may occur during early phase of the disease by hematogenous spread of the virus prior to the rise of neutralising antibodies. Such lesions do not constitute generalised herpes zoster.[1,8] Steroids are best withheld in these cases except undercover of antiviral therapy.[9] Hence, systemic corticosteroids was not given in the present case.

Majority (75%) patients recover in 6 months to one year[3,5] and complete recovery has been noted as early as in 8 weeks.[4] Prognosis in this patient however, is guarded in view of the complete loss of conduction in the radial nerve trunk.

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