Short Communications

A Case of Femoral Neuropathy Associated with Eczema Herpeticum

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There are a few reports of trigeminal neuralgia, recurrent neuralgia and facial palsy associated with herpes simplex infections [1—3]. We present here a case of femoral neuropathy accompanying eczema herpeticum.

Case Report

The patient (Pediatrics 75, 139), a 14-month-old boy, who had suffered from chronic eczema, had a temperature of 38—39°C on April 19, 1975. After a few days, vesicular eruptions appeared on the face. On April 24, his mother noticed that he could not walk and admitted him to the Department of Pediatrics of our hospital.

Family History. There was an epidemic infection due to herpes simplex virus. The father developed herpes labialis on March 15, the mother on April 12, and the brother on April 20.

On admission, the temperature was 38.5°C and the pulse 120. Several vesicular eruptions were found on the face (Fig. 1). Liver and spleen were not palpable. Lymph nodes were enlarged in the cervical and inguinal regions bilaterally (r > 1). He was ill-humoured, but his mental state was clear. No neurological abnormalities were found in the upper extremities. The right hip and knee joints were flexed and he had intense pain in the right inguinal region. There seemed to be a moderate weakness of flexion of the right thigh and extension of the lower leg. The right quadriceps reflex was decreased, but normal on the left. The triceps sural reflex was normal on both sides. Sensory examination with pinprick was uncertain. Pathological reflexes, urinary disturbance and cerebellar signs were not found.

Laboratory Results. ESR was 55 mm/hr; urinalysis normal; hemoglobin 12.5 g per 100 cm³; red cell count 436 x 10⁶; white cell count 18400, with 40% neutrophils, 5% myelocytes, 1% stab form, 45% lymphocytes, 4% monocytes, 5% eosinophils; serum protein 6.5 g per
Fig. 1. Vesicular eruptions on the face

100 cm³; albumin 50.6%, globulin α₁ 9.5%, α₂ 19.5, β 11.5, γ 9.2; s-GOT 88 u, s-GPT 49. The cerebrospinal fluid was under normal pressure; the fluid contained 18 cells per cubic millimeter, protein 9 mg per 100 cm³, and glucose 69 mg. X-rays of the chest and pelvis were unremarkable.

On the electromyographic studies of the right rectus femoris muscle (May 9), there were few motor unit potentials recruited at the maximal contraction, and fibrillation potentials and positive sharp waves were detected at rest. No abnormal findings were found in the right adductor and left rectus femoris muscles.

Virological Studies. Herpes simplex virus was isolated from the vesicle on the face. Serum CF titers against herpes simplex virus were 1:4 (April 24) and 1:128 (May 6).

Course of the illness: He was treated with antibiotics for 2 weeks. Within several days after the admission the vesicular rash subsided and the temperature dropped to normal. On May 10 he began to walk with a slightly flexed position of the right leg, and was discharged. In August 1975 no difficulty in walking was observed and he had a normal response in the right quadriceps reflex.

Comment

The patient, a 14-month-old boy, was suffering from eczema herpeticum due to an epidemic infection in his family. Several days later he had paralysis of the right leg resulting in difficulty in walking. There was a moderate weakness of flexion of the right thigh and extension of the lower leg, and the right quadriceps reflex was decreased. The electromyogram revealed neuropathic findings in the right rectus femoris, but no abnormalities in the right adductor muscle. The diagnosis seems to be compatible with femoral neuropathy.

The question remained as to the pathogenesis of femoral neuropathy accompanying eczema herpeticum. The femoral nerve might be compressed by the adenopathy in the right inguinal region, or invaded by herpes simplex virus itself. As an involvement of cranial and peripheral nerves caused by herpes simplex virus, there were a few reports of trigeminal neuralgia associated herpes labialis [1], and neuralgia in recurrent herpes simplex [2]. Moreover, McCormick [3] pointed out that Bell's palsy may be caused by minor herpetic infections.