Segmental Muscular Atrophy in a Patient with Postpolio Syndrome

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A 53-year-old man complained of atrophy of his left leg persisting for three years. Although he had suffered from poliomyelitis at the age of two, he had experienced no weakness for almost fifty years since complete recovery of poliomyelitis. There was no bulbar palsy or sensory deficit. Deep tendon reflexes were decreased in the lower limbs. Nerve conduction study was normal. Electromyography revealed high amplitude motor units in the legs. Serum creatine kinase was normal. Neutralizing antibody titers for polio-1, 2, and 3 were ×128, ×128, and ×16, respectively. Computed tomography revealed severe fatty degeneration of muscles innervated by S1 and S2 myotome levels (1), including the long head of the femoral biceps, gastrocnemius and soleus muscle (Fig. 1).

This case was diagnosed as postpolio syndrome based on the criteria presented by Mulder et al (2). The segmental muscular atrophy in this case suggests patchy neuronal loss in the anterior horn (3, 4).

References

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Figure 1.
