Azd-1222

S

Neuralgic amyotrophy: case report

A 45-year-woman developed neuralgic amyotrophy following administration of AZD-1222 for COVID-19 immunisation [*dosage not stated*].

The woman presented with paresthesia and acute-onset left leg paralysis after 2 days from receiving the IM AZD-1222 [AstraZeneca COVID-19 vaccine] in her left deltoid muscle. She had received paracetamol [acetaminophen] after the vaccination. She had developed myalgia immediately after the vaccination, with no signs of paresthesia or paralysis. She denied any history of previous illness, including recent trauma and musculoskeletal disease. Her physical examination showed decreased strength against resistance in her left leg (grade 4), during hip flexion, extension and abduction, ankle dorsiflexion, knee extension, ankle plantar flexion and long-toe extension. There was a decrease in light-touch sensation in the left lateral femoral cutaneous, sural and saphenous nerve distributions. In the left leg, the deep-tendon reflex was normal. Her laboratory results, including erythrocyte segmentation rate, C-reactive protein, rheumatoid factor, creatine kinase, antinuclear antibody and anti-GM1 ganglioside antibodies were negative. MRI of the lumbar spine did not show any abnormal findings, except for a mildly protruded intervertebral disc at the L4 and L5 vertebral levels. Brain MRI showed no abnormal lesions indicating neoplasm or stroke that might cause leg paralysis. After 1 week from the onset of symptoms, nerve conduction studies of her legs were symmetrical and normal. Needle electromyography only revealed decreased motor unit recruitment in the left leg muscles.

The woman underwent a rehabilitation program involving general conditioning and the administration of unspecified NSAIDs. After 1 month from symptom onset, a follow-up examination revealed atrophy and persistent weakness of the left thigh muscles. Sensory nerve conduction studies indicated prolonged latency and decreased amplitude in the left saphenous and left lateral femoral cutaneous sensory nerve action potentials, and decreased amplitude in left femoral compound motor action potential. Needle electromyography revealed decreased motor unit recruitment in the left leg muscles, and active denervation potentials in the left vastus medialis and iliopsoas. This electrodiagnostic re-evaluation showed axonal and demyelinating lumbosacral plexopathy, which mainly involved the L2, L3, and L4 nerve fibers. T2-weighted contrast-enhanced lumbar MRI showed increased intensities in the left obturator and femoral nerves at the proximal site. T2-weighted thigh MRI revealed increased signal intensities with atrophic changes in the rectus femoris, vastus medialis and vastus lateralis muscles. On the basis of clinical, radiologic and electrodiagnostic findings, she was diagnosed with neuralgic amyotrophy. Thereafter, she was treated with prednisolone to alleviate her symptoms. Subsequently, she showed slight motor improvement. The development of neuralgic amyotrophy was attributed to AZD-1222

Kim SI, et al. Leg paralysis after AstraZeneca COVID-19 vaccination diagnosed as neuralgic amyotrophy of the lumbosacral plexus: a case report. Journal of International Medical Research 49: No. 11, Nov 2021. Available from: URL: http://doi.org/10.1177/03000605211056783

803620267