

A RARE CASE OF BOTULISM AFTER HOMEMADE SAUSAGE INGESTION: INITIAL MISDIAGNOSIS AND ITS LONG-TERM FUNCTIONAL OUTCOME

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Background

Botulism is a rare neuromuscular disease caused by botulinum toxin from *Clostridium* species. It presents with cranial nerve paralysis with descending progression and is often linked to consuming contaminated food. Diagnosis is confirmed through toxin detection. Treatment involves supportive care and antitoxin, with PMR essential for recovery.

Case report

A 45-year-old male with a history of dyslipidemia, obesity, and hyperuricemia, who was previously independent in ADL, presented to the Emergency Department (ED) with holocranial headache, nausea, photophobia, dizziness, and right upper limb paresthesia. A CT scan showed no significant findings, and he was discharged after symptomatic treatment. Two days later, he returned with worsening symptoms, including dysphagia and progressive global motor deficits. He reported consuming homemade sausages prior to symptom onset. Physical examination revealed peripheral facial paralysis, dysphagia, flaccid dysarthria, and symmetric tetraparesis (MRC G3), without sensory deficits. A lumbar puncture showed slight albuminocytological dissociation. Suspecting Guillain-Barré Syndrome, the patient was transferred to the ICU for respiratory failure risk, completing 5 days of immunoglobulin therapy. On day 8, he started physiotherapy, including speech and physical therapy. After 2 weeks, the diagnosis was confirmed with a positive *C. botulinum* neurotoxin test. Due to favorable clinical progression, the patient was discharged with outpatient rehabilitation. At 6 months follow-up, there was significant improvement in neuromotor function, particularly in orofacial motor skills and dysphagia. Muscle strength was grade 4+ globally, except for proximal thigh strength (grade 4). He regained independence in ADLs, needing minimal assistance for transitions, and was able to walk independently with slight postural imbalance. (video)

Conclusion

Although the antitoxin was not administered due to the delayed definitive diagnosis of botulism, the patient had a favorable clinical outcome. The physiatric treatment, tailored to improve orofacial motility, voice and swallowing training, along with global muscle strengthening and gait training, was essential in the patient's rehabilitation.

Keywords: Botulism; Misdiagnosis; rehabilitation