Outbreak of Foodborne Botulism in Sacramento Region: Delayed Identification of Some Patients

The California Department of Public Health (CDPH), in collaboration with Sacramento County Public Health (SCPH) and neighboring county public health departments, has been investigating an outbreak of foodborne botulism associated with eating nacho cheese sauce served at the Valley Oak Food and Fuel gas station in Walnut Grove, Sacramento County. Sale of prepared food at the gas station was stopped on May 5, 2017, but persons possibly exposed to the nacho cheese sauce continue to be identified. From mid-April through May 16, 2017, ten patients with confirmed or suspect botulism and possible exposure to the gas station have been identified from Sacramento, San Joaquin, Colusa, and Solano counties. All ten patients are hospitalized, and there have been no deaths. None of these patients have had recent risk factors for wound botulism.

During this outbreak in the Sacramento region, as well as in another recent outbreak of botulism in southern California (due to deer antler extract tea), the recognition of botulism was delayed for over a week for some patients who were either already in an intensive care unit or sent home from the emergency room. In some cases, patients had relatively mild neurologic symptoms when they first presented to medical attention. We are asking clinicians who may see patients with botulism to be alert for this potential diagnosis and to consult with their local public health department immediately if botulism is suspected. Public health departments can facilitate the release of botulism antitoxin for treatment. In California, adult botulism is more commonly associated with injection drug use or contaminated wounds. However, foodborne botulism continues to be identified in California. While home-canned vegetables have often been implicated in past outbreaks of foodborne botulism, the lack of exposure to home-canned foods should not rule out the consideration for botulism in the differential diagnosis of a patient with compatible symptoms.

Clinically, the early signs of botulism are bilateral cranial nerve palsies which may include blurred vision, diplopia, ptosis, dysphagia, dysarthria, or facial weakness. Muscle weakness then descends bilaterally and may lead to respiratory failure and death, unless promptly recognized and treated with antitoxin and intensive care support. Fever is absent, and patients remain alert and responsive with no sensory deficits. Symptoms generally begin 18 to 36 hours after eating a contaminated food or drink, but they can occur as early as 6 hours or as late as 10 days after exposure. In the current outbreak, some patients have presented initially with mild symptoms and have progressed slowly over several days.

Because botulism is rare and most healthcare providers may not be familiar with botulism, we encourage clinicians to have a high index of suspicion for botulism if they see a patient with compatible neurological symptoms, consult with a neurologist if needed, and notify their local public health department immediately. Botulism antitoxin
is only available through the public health department, and treatment with antitoxin
should be initiated based on compatible clinical presentation and should not await
laboratory confirmation. Laboratory testing is only available through a public health
laboratory, and confirmatory testing can take up to a week.

Additional information about botulism may be found on the CDC website:
https://www.cdc.gov/botulism/