



BOTULISM SUMMARY LOS ANGELES COUNTY, 2005

A total of eleven patients were reported with suspected botulism in 2005, eight of which were confirmed with the disease (Table 1). Most cases were male (n=6), most were Hispanic (n=4) and ages ranged from 17 to 82 years (mean=45). Seven suspect cases were injection drug users. Suspect cases were reported throughout the year, with May having the greatest number of suspects (n=4). Antitoxin was administered to most suspect cases (n=8) based on their risk factors and presenting signs and symptoms.

The LAC Public Health Laboratory (PHL) performed analyses on eight suspect cases. After investigation, the following dispositions were made: two cases were confirmed as foodborne botulism, six were confirmed as wound botulism, and three were not tested because they were diagnosed with other central nervous system diseases. This report excludes cases of infant botulism, which is monitored by the California State Department of Health Services.

CASE REPORTS

Confirmed Foodborne Botulism (n=2): An outbreak of foodborne botulism resulted in the death of an elderly Pacific Islander man and long-term illness of his grandson. Food samples removed from their home several days after onset were negative for toxin or clostridial growth; however the most likely food vehicle, reheated salmon, was discarded prior to testing.

Confirmed Wound Botulism (n=6): Six of seven injection drug users reported with possible botulism were confirmed; four were males and four were Hispanic. Four were confirmed by demonstration of botulinum type A toxin in serum, while another demonstrated toxin that could not be differentiated due to insufficient sample size. The sixth confirmed case had a negative serum screen but a wound that grew *C. botulinum* producing type B toxin. All six confirmed cases received botulinum antitoxin.

Other Central Nervous System Disease (n=3): Three patients reported with possible botulism were found to have another neurological disorder and were not tested for botulism. All three suspects occurred in May. Two had no risks for wound botulism; the first was a 48-year-old male with multiple small strokes, while the second was a 40-year-old male who suffered from a cervical spinal cord tumor. The third suspect was a 47-year old male with a history of injection drug use who was diagnosed with brain stem encephalitis of unknown etiology.

COMMENTS

Botulism testing using the mouse bio-assay is available only in the PHL and state or CDC laboratories, and antitoxin is available in California only upon release by designated public health physicians in ACDC or the California DHS. For these reasons, reporting of hospitalized cases is felt to be complete. However, under-detection of mild cases is possible.

Botulism is one of seven biological agents classified as "Category A" for bioterrorism preparedness, requiring the highest priority for reporting. Heightened concern over bioterrorism should lead to increased consultations with Public Health for possible botulism cases.



Table 1. Suspected Botulism Cases, LAC DHS, 2005

Age/ Sex	Race/ Ethnicity	Month of onset	Injection drug user	Serum test*	Stool test	Other test – Result ^{&}	Anti- toxin	Diagnosis
43 M	Hispanic	3	Y	Neg	-	Abscess culture Pos Type B	Y	Confirmed wound
40 M	Unk	5	Y	-	-	-	N	Cervical cord tumor
47 M	Hispanic	5	N	-	-	-	N	Brain stem encephalitis
48 M	African-Amer	5	N	-	-	-	N	Multiple strokes
54 F	Hispanic	5	Y	Pos Type A	-	-	Y	Confirmed wound
40 M	Hispanic	6	Y	Pos Type A	-	-	Y	Confirmed wound
35 M	Hispanic	8	Y	Pos Type unk	-	Wound aspirate culture neg.	Y	Confirmed wound
50 F	African-Amer	8	Y	Pos Type A	-	-	Y	Confirmed wound
36 M	African-Amer	9	Y	Pos Type A	-	Wound culture neg.	Y	Confirmed wound
17 M	Asian/PI	12	N	Pos Type A	-	Food items neg.	Y	Confirmed foodborne
82 M	Asian/PI	12	N	Pos Type A	Pos Type A	Food items neg.	Y	Confirmed foodborne, fatal

Pos – test was performed and result was positive
Neg – test was performed and result was negative
* Botulinum toxin screen by mouse bio-assay
& Culture for clostridia (wound material, food item)