Abstract

Infant botulism is an intestinal toxemia caused principally by Clostridium botulinum. Since the infection occurs in the intestinal tract, numerous food products have been investigated for the presence of C. botulinum and its neurotoxins. In many countries, people use linden flower (Tilia spp.) tea as a household remedy and give it to infants as a sedative. Therefore, to help provide a clear picture of this disease transmission, we investigated the presence of botulinum spores in linden flowers. In this study, we analyzed 100 samples of unwrapped linden flowers and 100 samples of linden flowers in tea bags to determine the prevalence and spore-load of C. botulinum. Results were analyzed by the Fisher test. We detected a prevalence of 3% of botulinum spores in the unwrapped linden flowers analyzed and a spore load of 30 spores per 100 grams. None of the industrialized linden flowers analyzed were contaminated with botulinum spores. C. botulinum type A was identified in two samples and type B in one sample. Linden flowers must be considered a potential vehicle of C. botulinum, and the ingestion of linden flower tea can represent a risk factor for infant botulism.

Keywords
Botulinum spores, Linden flower tea, Infant botulism