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HEALTH ALERT

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TWO CASES OF ACCIDENTAL ACONITE POISONING FROM MEDICINAL HERBS PURCHASED IN SAN FRANCISCO CHINATOWN SHOP

Situation: Two cases of accidental aconite poisoning associated with drinking tea brewed from medicinal herbs have occurred in San Francisco since February 2017. Both were previously healthy individuals who presented to the E.D. with severe, refractory ventricular arrhythmias after purchasing tea from the same herbalist shop (Sun Wing Wo Trading, 1105 Grant Avenue, SF). Blood and/or urine samples and leftover tea were positive for aconite in both cases. SFDPH has removed suspect tea components from the shop and is investigating further.

Background: Aconite is present in *Aconitum* plants, commonly called monkshood, helmet flower, devil's helmet, wolfsbane, "chuanwu," "caowu," or "fuzi" and is used in Asian herbal medicine to treat pain, fever, cough, asthma, and other conditions. It is given as a tincture, paste, or herbal tea. However the plant's leaves, flowers, stems, and roots are highly toxic and serve medicinal purposes only after undergoing a detoxification process. Poisoning occurs with inadequate processing or consuming large quantities. Symptoms begin within minutes to a few hours after ingestion, including severe cardiovascular manifestations.

- Neuro: paresthesia, weakness that can progress to paralysis, rarely seizures
- GI: nausea, vomiting, abdominal pain, diarrhea
- CV: palpitations, chest pain, and/or hypotension associated with ventricular ectopy, fibrillation, and/or tachycardia.

Toxicity results from aconite's actions on voltage-sensitive sodium channels. The half-life is 3-18 hours and there is no specific antidote. Aconite-induced ventricular arrhythmias are often refractory to cardioversion and antiarrhythmic drugs and may require percutaneous cardiopulmonary bypass, extracorporeal membrane oxygenation (ECMO), or ventricular assist device (VAD).

Clinical Resources: (also available at www.sfdcdp.org/aconite)

Chan. Clinical Toxicology (2009) 47, 279–285.

ACTIONS REQUESTED OF CLINICIANS:

1. **Consider aconite poisoning** in patients presenting with otherwise unexplained neurologic, GI, or cardiovascular symptoms who have recently used herbal medication, particularly those presenting with ventricular arrhythmias.
2. **Report** suspect cases, and direct your questions regarding aconite poisoning, to Poison Control at 1-800-222-1222.
3. **Remind patients** that with any medication or supplement that is not regulated by the Food and Drug Administration the exact contents, purity of ingredients, and adequacy of preparation may be unknown, and there may be risk of toxic or life-threatening side effects.