

under pressure at the time of chest tube placement, her tenuous clinical condition, and the acidemia that reflected a lactic acidemia due to hypoperfusion. The lack of a mediastinal shift was due to the collapse of both lungs. The initial chest x-ray film certainly underestimated the degree of collapse because it was taken several hours earlier at the referring facility. We think cardiovascular failure was imminent and would have occurred without the placement of the chest tubes.

The principle of Chinese acupuncture is that inserting small needles along various channels or meridians restores the balance between yin and yang. The acupuncture needles are typically made of stainless steel and are 28 gauge in size or smaller. The so-called lung channel runs from below the clavicle, down the median aspect of the arm, and ends in the thumb.<sup>5</sup> Under usual circumstances, penetration of the skin along these points is harmless although possibly associated with minor discomfort. Many practitioners insert needles in other locations, however, including the upper back, as noted in the reports of pneumothorax cited. Pneumothorax can develop, particularly when the insertions are done during acute asthma attacks.

Although acupuncture has been shown by investigators to cause bronchodilation, possibly by cholinergic inhibition,<sup>6,7</sup> it is less effective than nebulized isoproterenol therapy, and the effectiveness is transitory.<sup>8</sup> Given this knowledge and the untoward effects of acupuncture reported herein, the use of this alternative therapy should be discouraged for the management of asthma. Patients who consider acupuncture for the management of their asthma should be informed of the possibility of life-threatening pneumothorax.

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## Clinical Trial of Botulism Immune Globulin for Infant Botulism

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WE WISH TO ALERT your readers to a new potential treatment of infant botulism, human-derived botulism immune globulin (BIG), that became available in California on January 1, 1991. The clinical trial of BIG is an efficacy (phase II) study sponsored by the Orphan Drug Program of the US Food and Drug Administration and the California Department of Health Services. Available laboratory data and experience with food-borne botulism suggest that prompt treatment of botulism yields the best outcome. To obtain BIG, physicians should contact the study office as quickly as possible when they suspect a diagnosis of infant botulism in their patient. The study's 24-hour telephone number is (415) 540-2646.

Infant botulism has a broad clinical spectrum of symptoms ranging from constipation and mild weakness to full paralysis requiring mechanical ventilation. Upon hospital admission the typical patient with infant botulism may have ptosis, a disconjugate gaze, expressionless facies, prominent head lag, diffuse hypotonia, and other neurologic findings. In spite of this, infant botulism may be difficult to recognize in its early stages, and, even today, the most common admitting diagnosis for these patients remains "rule out sepsis."

In the past two years, 68 patients with infant botulism were admitted to hospital in California, most of whom required treatment in the intensive care unit. The average length of hospital stay for these infants was 4.9 weeks, and total hospital costs exceeded \$4 million. It is hoped that treatment with BIG will substantially shorten both the duration of illness and the cost of hospital stay for affected infants.

General inquiries regarding this disease or the BIG study can be directed to the Infant Botulism Prevention Program offices at the telephone number listed above, 8 AM to 5 PM (Pacific Standard Time), Monday through Friday.

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(Frankovich TL, Arnon SS: Clinical trial of botulism immune globulin for infant botulism. *West J Med* 1991 Jan; 154:103)

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