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## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

## **Fallen from Grace, Ephedrine Finds Haven in Anesthesiology**



Ephedrine derives from the plant Ephedra sinica, or ma huang, a svelte evergreen used in China for more than 5000 years to treat cough, congestion, and wheezing. In 1885, a Japanese chemist first isolated the pure alkaloid, and in 1924, a landmark paper praised ephedrine's oral availability, enduring effect, and lower arrhythmia risk compared to its cousin epinephrine. When an American physician proved ephedrine's ability to treat pediatric asthma, the medication became an overnight sensation. Until the 1940s, it reigned as the oral bronchodilator of choice. As safer antiasthmatics were developed, however, ephedrine gradually lost its celebrity status, and imports of crude ephedra grew. By the late twentieth century, ma huang had gained notoriety as a performance enhancer, weight-loss supplement, and methamphetamine precursor. When legendary Argentine footballer Diego Maradona tested positive for ephedrine during the 1994 World Cup, hearts were broken, and both athlete and drug appeared as fallen angels. In 2003, the sudden death of Baltimore Orioles rookie Steve Bechler prompted swift prohibition by the Food and Drug Administration. Thankfully, ephedrine's turbulent trajectory in the public eye was not replicated in the operating room, where it has survived the test of time. (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology, Schaumburg, Illinois.) Jane S. Moon, M.D., University of California, Los Angeles, California, and Melissa L. Coleman, M.D., Penn State

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