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An American Dentist Pioneered Anesthesia in Spain

To the Editor:—In perusing the daily press of Madrid for early 1847, we have found several references to Mr. Oliver Machechan, an American dentist in practice there who, according to extensive items in newspapers dated January 28–31, 1847,[1–6] had used ether anesthesia in performing dental extractions. The existence of these reports suggests that Machechan was the second to use sulphuric ether for anesthetic purposes in Spain (the first having been Professor Argumosa-Obregón of the Medical Faculty at Madrid, on January 13 of that year)[7]; and if claims concerning the efficiency of the anesthetic are true, Machechan's trials were the first to meet with complete success. For the good of his reputation, this positive outcome was fortunate, if an anonymous dentist promising painless extractions prior to January 20 was in fact Machechan.

Machechan is again mentioned in the Madrid press in 1848 as having performed some of the first Spanish trials of chloroform as an anesthetic (Gaceta de Madrid, February 10, 1848). Our attempts to delve further into the biography of this apparently highly considered dentist have so far been unsuccessful.

In his trials with ether, Machechan administered the anesthetic with a Harapath-Landsdown inhaler, as did the other Spanish pioneers Argumosa-Obregón and Mendoza (the latter in Barcelona on February 16, 1847) and many other Spanish surgeons who tried out ether before the year's end.[7] News of this inhaler, which consisted of an animal bladder with a mouthpiece, reached Madrid in the same letter in which a Dr. Forbes of London described the use of ether to a Sr. Barron, who immediately communicated with Professor Argumosa-Obregón.[8] The inhaler was even erroneously attributed to Machechan in a medical journal published in Cadiz, the *Revista de Ciencias Médicas* (February 10, 1847).

In conclusion, our recent research enables us to correct our own[7] and others' previous notions as to the early chronology of ether anesthesia in Spain, in that it now seems almost certain that the second exponent of this technique here was Machechan.

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Long-lasting Neuromuscular Blockade from Pipecuronium

To the Editor:—Pipecuronium is a long-acting nondepolarizing neuromuscular blocking agent without hemodynamic effects. These properties have led to its increasing use during anesthesia for coronary artery bypass graft (CABG) surgery. Studies have shown no untoward effects from doses of pipecuronium as large as $4 \times ED_{95}$[1,2] and similar mean durations of drug action in normal and renal-failure patients.[3]

We recently cared for a patient undergoing CABG surgery who, over a 5-h period, inadvertently received a pipecuronium dose of 520