

Peer Review

Review of: "Pioneering Spinal Anesthesia: A Historical Examination of Benedetto Schiassi's Landmark Work"

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This is a well-crafted review of the early history of spinal anesthesia, accomplished in Italy at the turn of the last millennium and well-documented by publication and public presentation, very reminiscent of John Snow's foundational presentations and publications about clinical anesthesia a half-century earlier.

At about the same time, other international pioneers of spinal or epidural anesthesia such as Corning in New York, Bier and Hildebrandt in Kiel, Tait and Caglieri in San Francisco, Rudolph Mattas in New Orleans, and Tuffier in Paris were utilizing the same procedure; in fact, the simultaneity was nothing less than astonishing!

Nevertheless, this is an important addition to that body of historical knowledge because it is accompanied by primary source references, which are nicely woven into the text (with English translation) as well as some charming anecdotes.

Some of the English constructions are awkward, and the manuscript would benefit from a syntax review/collaboration with a native English speaker if the authors wish to retain an English language submission. For example, "deliquoration" used in the Table has a literal meaning of removal of liquid, but it is more commonly constructed as the removal of cerebrospinal fluid to reduce CSF pressure in the intrathecal space, more commonly utilized currently to treat spinal cord ischemia by improving spinal cord blood flow.

It would also help to "normalize" the needle diameter conversions, or at least include the standardized conversion from ga. to mm, i.e., the 25 ga needle = 0.455 mm, and the 27 ga. needle = 0.360 mm, just so the reader has a clearer understanding.

Similarly, in the text, reference is made to the cocaine dose as 1 centigram (an unusual unit for drugs, more typically thought of in mg, therefore, 10 mg) and 1 “cmc” (cc, or mL), therefore yielding a concentration of 1% cocaine. This is a relatively dilute concentration of cocaine, although more potent in the neuraxis than its typical effect topically or by infiltration. An additional point in the text, not elaborated on further but very interesting, is that “the medicine is at 38°.” This is well recognized as changing the baricity of the administered local anesthetic, rendering it iso- to hypobaric, so it is therefore interesting that it was administered to a prone-positioned patient. (van der Griend BFH. *Anaesthesia* 2006;61:1016-7; Hallworth SP, Fernando R, Columb MO, Stocks GM. *Anesth Analg* 2005;100(4):1159-65) We typically choose to make local anesthetics hypobaric, for example, Buie’s jackknife position for anorectal surgery or hemorrhoidectomy. We don’t know why Schiassi chose to warm the cocaine – and perhaps never will!

Altogether, a nice addition to the early portion of the arc of spinal anesthesia history!

Declarations

Potential competing interests: No potential competing interests to declare.