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## LETTERS TO THE EDITOR

### Some observations about anesthesia in South America: the changing Peruvian context



### Algumas observações sobre anestesia na América do Sul: uma mudança no contexto peruano

Dear Editor,

Lema<sup>1</sup> alleged on page 38 of the chapter titled “International Scope, Practice, and Legal Aspects of Anesthesia,” in Miller’s Anesthesia (eighth edition) that in South America only Colombia and Chile have laws for regulating the expertise and care’s standard in anesthesia. In addition, he mentioned that physicians, surgeons and paramedical personnel with a low level of anesthesia training have practiced it for many years in several countries of the region. He claimed that the situation persists in some countries, included Peru, even with government authorization. Nonetheless, current peruvian context is different, thus I wish to clarify his observations about the practice of anesthesia in Peru.

In the not-so-distant past, these situations before described, were common in Peru. However, since 2005 when the first anesthesia norm was approved by Peruvian Health Ministry, they had a decreasing trend because were not allowed anymore by law.<sup>2</sup> As a consequence, the number of physicians with an anesthesiology formal training as is required by norm, has increased for working in most of the operating rooms and related areas. Moreover, the peruvian residency programs last a minimum of three years (Anesthesiology) and a maximum of five (subspecialties in Cardiovascular and Obstetric Anesthesiology).

Currently, there are two government norms which describe all aspects and requirements (such as facilities, trained personnel, monitoring, medical equipment, drugs, perioperative assessment) for working with quality in the anesthesiology field.<sup>2,3</sup> These norms are mandatory for public and private hospitals with operating rooms and must be obeyed in the whole country. Furthermore, Peruvian Medical College has begun a certification process of medical

knowledge requiring a number of credits obtained in medical education courses for all physicians (general practitioners and specialists) each five years.<sup>4</sup>

On same chapter, Dr. Maria Carmona mentioned a situation that happens in Brazil, but is common to Peru too. This situation refers to the fact that Brazilian and Peruvian Constitutions declare health as a right for every citizen and health care as government duty. Nevertheless, total expenditure on health is 8.4% of gross domestic product in Brazil y only 5.1% in Perú.<sup>5</sup> As a consequence, the health care systems have heterogeneity in quality amongst different regions of both countries, in concordance with the economic development and inequality of these regions.

In conclusion, although there are many issues in the work of peruvian anesthesiologists yet, today the working environment is changing and the government is enforcing the law for aspiring to have better standards of patient’s care in the whole country. Consequently, nowadays our patients receive safer anesthesia than previous decades.

### Conflicts of interest

The author declares no conflicts of interest.

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## Letter to the editor: Spinal subarachnoid hematoma after-spinal anesthesia: case report [Rev Bras Anesthesiol 2016]



### Carta à editora: Hematoma espinal subaracnoideo após raquianestesia: relato de caso [Rev Bras Anesthesiol 2016]

Dear Editor,

I have read with very great interest the case report published by Vidal et al. Spinal subarachnoid hematoma after-spinal anesthesia: case report Rev Bras Anesthesiol 2016.

In this clinical case presented, under arachnoid hematoma occurs after a single puncture with 25 G needle for spinal anesthesia. This interesting clinical case, testifying that no act of anesthesia is harmless, even in patients ASA I.<sup>1</sup>

However, two comments are made about the etiology of this spinal hematoma. The patient received 100 mg of ketoprofen intra operatively before the recovery of motricity. Indeed, the anti-inflammatory are known to have anti platelet effects and thus bleed.<sup>2</sup> Ketoprofen administration is very frequent after spinal anesthesia and the timing of administration of ketoprofen need to be done after the end of spinal anesthesia.

A second point, alas no biological test of coagulation after the diagnosis of spinal hematoma. Indeed minor hemophilia or Willebrand disease is to depart from principle by specific assays. The occurrence of such an incident should have a hematological opinion to prevent a minor disorder of coagulation that with ketoprofen puncture combination could increase the likelihood of bleeding.

The intraoperative hypothermia decreases platelet aggregability and may be an associated factor favoring the hemorrhage on land of subclinical coagulation abnormality.

Thank you to our colleagues for sharing this clinical experience reminding us that no act is trivial.

### Conflicts of interest

The author declares no conflicts of interest.

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