rise of 3.4%. The ionized form therefore will be decreased by the same amount.

The increased free base form of the local anesthetic agent could traverse the dura and lead to a higher level of epidural blockade in the pregnant patient. It might also explain the initial faster spread of the block reported.

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REFERENCES

1. Fagraeus L, Urban BJ, Bromage PR: Spread of epidural analgesia in early pregnancy. ANESTHESIOLOGY 58:184–186, 1983
2. Bonica J: Principles and Practice of Obstetrical Analgesia and Anesthesia. Philadelphia, FA Davis, 1972, p 28
3. Sjostedt S: Acid-base balance of arterial blood during pregnancy, at delivery, and in the puerperium. Am J Obstet Gynecol 84:775–779, 1962

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59:601, 1983

Corrections Concerning Alleged Disconnect Alarm Failure

To the Editor:—The recently published letter by Reynolds[1] regarding an alleged failure of a Drager DPM® requires some correction and clarification. The DPM® (Drager Pressure Monitor, not disconnect pressure monitor as incorrectly stated) is a patient system pressure monitor that produces an audible and visual warning when the peak pressure in the system fails to exceed the dialed-in monitoring pressure within a period of nominal 15 s.

Due to the fact that the pressure in the system during the reported incident obviously exceeded the dialed-in monitoring pressure (5 cmH_2O) within the preset time period, the alarm function of the monitor was not actuated. The conclusion by the author that the monitor failed is, therefore, incorrect.

It can be assumed, however, that the incident was caused by a failure of the operator to follow the instructions of the Instruction Manual when dialing in the alarm level. The instruction manual clearly states (and explains with various examples) that a setting of 5 cmH_2O monitoring pressure should be used only if the peak pressure in the system is below 15 cmH_2O. While the information concerning the pressure, flow, resistance, and compliance conditions in the report concerning the incident itself and the following tests are incomplete, the findings lead to the conclusion that the DPM® was used incorrectly.

The conclusion of the author that North American Drager changed the lowest setting from 5 cmH_2O to 7.5 cmH_2O on subsequent models of the DPM® (DPM2 and DPM-S) in recognition of a shortcoming is incorrect. The increase of pressure for the lowest setting was necessary to establish overlapping of pressure sensors in the unit to utilize a self-diagnostic circuit that reveals malfunctioning of the circuitry.

While separation of the 15-mm connector from the Y-piece is the most common cause for circuit disconnects, the separation of the 15-mm connector and tube is rather uncommon. In our opinion, it would have been worthwhile to investigate why this uncommon disconnection took place and if, possibly, an undersized connector was used in the circuit.

The reported incident clearly reveals the necessity to follow manufacturer's instructions when operating life-supporting equipment. Reference is made to North American Drager's information in the January issue of ANESTHESIOLOGY entitled "Overcoming the Disconnect Hazard," which contains a clear warning concerning the habit of leaving pressure monitors at the lowest pressure setting.

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REFERENCE

1. Reynolds AC: Disconnect alarm failure. ANESTHESIOLOGY 56:488, 1983

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