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Treatment of Hiccups by Continuous Positive Airway Pressure (CPAP) in Anesthetized Subjects

To the Editor:—Hiccups during anesthesia can be a very difficult problem to manage.^{1,2} In our experience, hiccups occur more commonly during light anesthesia with thiopental and low-dose fentanyl for short procedures such as uterine curettage and other minor OB-GYN operations. In these cases, it is difficult to treat hiccups by pharmacologic means, and we have been forced at times to use succinylcholine to end the jerky diaphragmatic contractions. Looking for a more effective and easier way to cope with this complication, we recalled our grandmother's advice: "Hold your breath and close your nose and mouth!" Accordingly, we tightly held a standard anesthesia face mask to our patients while maintaining an O₂ flow of about 8 l/min with the pop-off valve of the circuit partially closed and without actively assisting ventilation. In this way, we created a continuous positive airway pressure (CPAP) of between 25 and 35 cm H₂O³ with the patient breathing spontaneously. We have employed this technique in 16 patients. Within 5 to 15 s of initiating CPAP, hiccups stopped in all of our patients who then started breathing

regularly after a short apneic period. In none of them have we observed stomach distension, vomiting, or other adverse effects. We conclude that CPAP is an effective treatment of hiccups in anesthetized subjects.

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Cannulation of the Internal Jugular Vein: Another Cautionary Note

To the Editor:—The recent report by Goldfarb and Lebrech of percutaneous cannulation of the internal jugular vein in 1,000 patients with coagulopathies reported a 99.3% success rate with minimal complications, and concluded that the internal jugular vein "can reasonably be proposed as a usual route of catheter placement in such patients."¹ Although their success and minimal complications in a large series of patients is most im-

pressive, and the unique requirement of their relatively inflexible biopsy needle dictated the use of the internal jugular vein, we suggest that their conclusion is much too strong for routine application of their approach on three counts: 1) Complications which occur during internal jugular cannulation in patients with defects in hemostasis may be catastrophic and other routes are available.²⁻³ 2) A large gauge needle should not be used

for the initial puncture. We use a 20-gauge catheter-over-needle set for the initial puncture, confirm a venous waveform and pressure once the 20-gauge catheter is passed into the vein, and then pass a 0.025 guidewire over which a larger introducer sheath can be passed.⁴⁻⁵

In this manner carotid puncture, if it occurs, is with a small needle which is less likely to result in serious morbidity. 3) The meticulous manner in which Goldfarb and Lebrec recorded their experience suggests that persistence pays off, since in 3% of their patients six "thrusts" were necessary to locate the vein. We have the impression such persistence is associated with more frequent carotid artery puncture although we did not record the exact number of attempts in our series.³

In conclusion, we are impressed with the success of Goldfarb and Lebrec, who have clearly demonstrated that internal jugular vein cannulation may be performed in the presence of severe defects of hemostasis and, in pressing circumstances, may be indicated. However, for most cases involving defects of hemostasis, we suggest that alternate routes be considered. In all cases we urge use of the Seldinger technique to permit initial cannulation with a small, short needle and confirmation of the venous waveform and pressure before proceeding to the larger catheter.

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A Simple Solution for Collecting Drainage from a Nasogastric Tube

To the Editor:—The open end of a nasogastric (NG) tube is often a necessary nuisance at the head of the operating table. It may require periodic suction or may drain spontaneously (not infrequently onto the anesthesiologists' scrub clothes or shoes). In the former situation, the application of suction with full vacuum may damage the gastric mucosa. In the latter, the open end of the NG tube must be attached to some sort of container. An empty iv solution plastic bag serves this purpose as well as provides a convenient method of measuring gastric output. The NG tube is connected to the port which normally accepts the iv tubing. The other port used to inject additives into the bag must be cut. Negative pressure

may be applied periodically to the system by attaching the port which is left open to the atmosphere to the vacuum system. It is advisable to allow some degree of leak in the connection.

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A Few Observations and Suggestions Regarding the Art of Public Communication

To the Editor:—The continuing necessity to improve my own delivery has made me a keen observer of the art of speaking at meetings. Over the last ten years, I have

attended numerous anesthesia symposia and congresses in England, Europe, America, South Africa, and the Far East. One is struck by the propensity of so many speakers

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