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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.

CARLO SAITTO, M.D.
GIUSEPPE GRISTINA, M.D.
ERMELANDO V. COSMI, M.D., L.D.
*2nd Department of Obstetrics and Gynecology
University of Perugia
Perugia, Italy*

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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