maintained with 1–2% halothane in oxygen supplemented by pancuronium. During two-lung ventilation, the Pa_{O_2} was 486.0 ± 104.0 mmHg. Shifting to OLV lowered the Pa_{O_2} to 191.0 ± 144.0 mmHg ($P < 0.005$). Applying CPAP 10 cmH_2O to the nonventilated lung increased the Pa_{O_2} to 353.0 ± 178.0 mmHg when 7 l/min of oxygen was used ($P < 0.025$), and to 355.0 ± 175.0 mmHg when 1 l/min of oxygen was used ($P < 0.01$); there was no significant difference between the Pa_{O_2} levels whether 1 or 7 l/min of oxygen was used ($P > 0.2$).

The underwater seal assembly offers a major advantage when compared with other CPAP devices that include a pressure relief valve.[3,4] The pressure relief valve functions by limiting the escape of the inflowing oxygen and thereby creates constant distending pressure to the nonventilated lung. However, untoward occlusion of the pressure relief valve, an increase of the oxygen flow, or lung manipulation may result in an excessive rise of the airway pressure. The threshold resister valves offer a better alternative to the pressure relief valves,[5] but different threshold resister valves are required to achieve different CPAP levels. Also, both the pressure relief and the threshold resister valves cannot function as an indicator for bronchial sealing. In contrast, the underwater seal is used as an indicator for bronchial sealing,[6] as well as a CPAP valve which can be adjusted according to the required CPAP level. The CPAP level shows minimal fluctuations secondary to changes of the oxygen flow or lung manipulation.

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On the Acceleration of Epinephrine Absorption by Lidocaine

To the Editor:—We were interested in the recent report by Ueda *et al.*[1] describing the effect of lidocaine on the absorption of epinephrine. The authors compared 0.5% lidocaine containing 1:200,000 epinephrine with 1:200,000 epinephrine alone. No mention was made of how these solutions were prepared.

Moore[2] has noted that commercially prepared local anesthetic solutions containing epinephrine have a low *p*H and are not as effective for vasoconstriction as freshly prepared solutions. Guyton[3] states that low *p*H will cause vasodilation.

We found the *p*H of commercially available 0.5% lidocaine with 1:200,000 epinephrine (Astra) to be 3.78, whereas a 1:200,000 solution of epinephrine prepared by diluting 1:1000 epinephrine with preservative-free normal saline had a *p*H of 5. If Veda *et al.* used solutions made in this fashion, the *p*H differences alone may have been responsible for the variation in epinephrine uptake attributed to the lidocaine.

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