in magnitude to the changes in cortisol following etomidate administration. For instance, plasma concentrations of cortisol decreased significantly from a baseline value of 11.4 μg/dl to an average of 5.5 μg/dl in the first and second hours after induction of anesthesia with etomidate.[2] Some or all of this decrease may be related to the circadian variation in plasma concentrations of cortisol.

Any contribution of the circadian rhythm would tend to increase the variability of plasma concentrations of cortisol measured following etomidate administration. These circadian-related changes may explain, at least in part, the conflicting results obtained by different investigators in this area of research.

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The Renal Effects of Dopamine

To the Editor:—By using dobutamine to control for the effects of dopamine on systemic blood pressure and flow, renal plasma flow, and glomerular filtration rate (GFR), Hilberman *et al.*[1] quite elegantly show that the diuretic and natriuretic effects of dopamine are independent of these variables. They go on to suggest, however, that dopamine inhibits tubular solute reabsorption directly. As pointed out by Miller[2] in his editorial, the control of tubular function is complex and may depend on multiple variables in addition to global renal plasma flow and GFR, including changes in the regional distribution of blood flow within the kidney and stimulation of many different types of adrenergic receptors or sympathetic nerve terminals located in both proximal and distal tubules.

An alternative, and more readily verifiable explanation for the observations of Hilberman *et al.* is that the dopamine infusion may have suppressed the adrenal secretion of aldosterone. Tonic dopaminergic suppression of plasma aldosterone, perhaps maximal even at endogenous levels of dopamine in normal individuals, has been demonstrated by the use of dopamine antagonists and infusions by Noth *et al.*[3] There is also *in vitro* evidence to suggest that this effect may occur in the adrenal glomerulosa cells, independent of the effect of dopamine on renal blood flow and the resultant suppression of the renin–angiotensin–aldosterone system.[3,4]

Hilberman *et al.* state that elevation of plasma angiotensin-II was likely in their post-cardiac surgical patients, but they do not comment on the stimulation of aldosterone release that would result, and they did not measure plasma aldosterone levels before and after the infusions of dopamine and dobutamine. Suppression of aldosterone secretion might account for at least part of the diuresis and natriuresis seen in the dopamine group. Studies attempting to demonstrate a direct natriuretic and diuretic effect of dopamine on the renal tubule will need control for this important variable.

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In reply:—Dr. Cramolini's comments are well taken and appreciated. It should be noted that a direct tubular effect of dopamine, which would account for the observed diuresis and natriuresis, has been documented.[1]

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On Preventing Transmission of Viral Infections

To the Editor:—Anesthetists constantly deal with blood, blood products, and bodily secretions. A recent review[1] has dealt with the large number of infectious diseases to which we are regularly exposed and has made recommendations regarding personal protective measures. In view of the morbidity and possible mortality associated with these diseases, it behooves us to take all reasonable precautions to avoid contact with potentially infective materials.

We believe most anesthesia personnel take the appropriate precautions when dealing with blood products and patients known to be infective. We have noticed, however, many anesthesiologists and CRNAs frequently place themselves at risk by repeated contact with patients' oral secretions. This type of direct contact not only places the anesthetist at risk but may also endanger patients' health.[2,3] In addition, those anesthesia practitioners who do wear gloves during intubation often contaminate their working area by replacing their soiled laryngoscope on an otherwise clean surface. It has been shown that the hepatitis B virus remains stable on environmental surfaces and that through contact with these surfaces, the disease may be acquired.[4] This is also true of other infectious agents.[1]

We propose that gloves be worn during all nasal and oral endotracheal intubations. Immediately following intubation, the blade of the laryngoscope should be grasped with the right hand and the right glove pulled off (everted) over the laryngoscope blade. The soiled outer portion of the glove and the blade are now in contact. Since the blade is wrapped in a glove with only the clean inner surface exposed, it cannot contaminate the work table or personnel. In addition, the inverted glove/blade serves as a reminder that the contaminated blade contained within is soiled and needs cleaning. This simple procedure takes only a few seconds to accomplish, and the health of the patient and the anesthetist will be further safeguarded.

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