

contrast clonidine, a relatively specific alpha-2 agonist that acts indirectly by reducing central nervous system sympathetic outflow, would not be blocked by the actions of ethacrynic acid.<sup>4</sup> The mechanism for poor absorption in critically ill patients proposed by the authors may account for the ability of rectally administered clonidine to control hypertension in their patient when oral clonidine failed.

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*In reply:* We thank Dr. Hosking for his comments and concern that the use of ethacrynic acid may have interfered with the vasodilator actions of both nitroglycerin and nitropruside.

We reexamined our cases and noted that the first patient received ethacrynic acid, but as a secondary measure late in the course of managing her hypertension. None of the other five cases received ethacrynic acid. Therefore, we do not feel that ethacrynic acid interfered with the vasodilators in the first case. We will certainly keep this drug interaction in mind for future reference.

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## Fail-safe Oxygen Analyzers

*To the Editor:*—Whenever nitrous oxide is supplied to an anesthesia circuit, there is a real possibility that a hypoxic mixture will be delivered secondary to human error in setting the flow controls. Less commonly, inaccurate or leaky flowmeters in conjunction with N<sub>2</sub>O can lead to hypoxia. Use of an oxygen analyzer allows early detection of these errors but is often vitiated by another human error, failure to turn the analyzer on. A modification of

the anesthesia machine could guarantee that nitrous oxide will only be used when the oxygen analyzer is on.

An electromechanical fail-safe valve should be placed in the nitrous oxide intermediate pressure line. This valve would only be opened by a solenoid that is activated when the oxygen analyzer is turned on. Nitrous oxide could not be delivered unless the O<sub>2</sub> analyzer is turned on! If the machine is equipped with air or N<sub>2</sub>, these lines should also have electromechanical fail-safes. Of course the low O<sub>2</sub> alarm must have a default preventing settings below 20%.<sup>1</sup> Perhaps the fail-safe analyzer should be further refined to shut the valves automatically whenever reading below 20%, thus allowing only oxygen to be delivered to

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