nitroso-N-methylurethane (NNMU) produced histopathologic alteration closely resembling those seen in ARDS while preserving baseline cardiac output. We will wait for studies of hemodynamic effects of CMV + PEEP utilizing NNNMU lung injury model before casting the final vote.

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REFERENCES


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**Benzocaine-induced Methemoglobinemia in Sprague-Dawley Rats**

To the Editor.—A current experiment in our laboratory attempts to evaluate neurologic outcome following hypoxic-ischemic stress. Animals are intubated with PE 200 polyethylene tubing cut and tapered to tracheal size for 250- to 350-g male and female Sprague-Dawley rats. To facilitate intubation, catheters were lubricated with Americaine®, an ointment containing 20% benzocaine.

Several animals prepared in this manner were noted to have dark arterial blood in spite of PaO2 > 100 mmHg. In one instance, blood analyzed by a CO-oximeter® showed oxyhemoglobin as 74% and methemoglobin as 21.1%, while PaO2 was 125 mmHg.

We subsequently injected one rat subcutaneously with 0.1 ml Americaine®. By 10 min following injection, methemoglobin level increased from control of 0.8% to 28.5%.

It appears, therefore, that Sprague-Dawley rats, like newborn and infant humans1,2 and dogs,3 are deficient in reduced nicotinamide adenine dinucleotide-methemoglobin reductase.

We suggest that benzocaine-containing preparations not be used in rats.

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