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More on Benzocaine and Methemoglobinemia

To the Editor:—Severinghaus and colleagues make a valid point about the relationship between benzocaine and methemoglobinemia.¹ The replies of Beutlich² and Wachman³ are puzzling, because the efficacy or safety of topical benzocaine is not being called into question. There is, however, sufficient evidence to make a strong argument for a dose-dependent relationship between benzocaine and methemoglobinemia. This first came to my attention in 1989 and is exemplified by the case that I reported to the Food and Drug Administration and is referred to by Severinghaus *et al.* in their letter.¹

In reference to the 1979 Food and Drug Administration panel on this subject,* the findings of the panel convened in 1979 may not be valid in 1991 and deserve reassessment. Only 13 of the 50 references provided by Severinghaus *et al.*¹ are from articles appearing in the literature prior to 1979. It is in the best interests of our patients that users of benzocaine be educated so that they can be vigilant to the possibility of methemoglobinemia and be prepared to treat it. This is neither an indictment of benzocaine nor a suggestion that it be condemned or removed from products that contain it, as Wachman's³ letter implies; rather, it is a plea for the dissemination of knowledge

about the drug so that it may be used intelligently and safely and thereby continue to enjoy an admirable record of safety and efficacy.

I wholeheartedly support the recommendations of Severinghaus and colleagues.¹

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REFERENCES

1. Severinghaus JW, Xu FD, Spellman MJ: Benzocaine and methemoglobin: Recommended actions (correspondence). *ANESTHESIOLOGY* 74:385-386, 1991
2. Beutlich FW: Benzocaine and methemoglobin: Recommended actions (correspondence). *ANESTHESIOLOGY* 74:387, 1991
3. Wachman SL: Benzocaine and methemoglobin: Recommended actions (correspondence). *ANESTHESIOLOGY* 74:387, 1991

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Site of Hemodynamic Effects of α_2 -Adrenergic Agonists

To the Editor:—Eisenach *et al.*¹ recently demonstrated the thoracic spinal cord to be the site of hemodynamic effects of intrathecal α_2 -adrenergic agonists.

Our clinical experience with epidural clonidine partially confirms their conclusions.

With institutional approval and informed consent, 20 patients were prospectively studied to establish the intraoperative analgesic potency of epidural clonidine. Before induction of anesthesia, all of the patients had a catheter inserted 4 cm in their epidural space. The site of puncture was in accordance with the surgical procedure (esophagectomy, n = 7;

TABLE 1. Site of Catheter Puncture, Hemodynamic Data, and Duration of Analgesia

Level		n = 15	Mean Arterial Blood Pressure		%	Vasopressor (n)	Heart Rate		%	Duration of Analgesia (h)
			A	B			A	B		
T4-T5	Mean	3	88.6	54.0	-40	3	88	58	-34	4.2
	SD		2.4	1.4			10	2		1.3
T5-T6	Mean	2	78.5	48.0	-39	2	85	65	-24	3.2
	SD		1.5	5.0			5	5		3.0
T6-T7	Mean	2	82.5	50.5	-40	2	85	59	-31	3.0
	SD		7.5	0.5			5	11		
T7-T8		1	93.0	70.0	-25	0	80	60	-25	3.6
T8-T9		1	93.0	80.0	-14	0	60	50	-17	5.0
T9-T10		1	70.0	57.0	-19	0	100	60	-40	4.0
T11-T12	Mean	5	73.0	67.3	-8	0	85	64	-25	3.3
	SD		5.3	4.5			11	6		0.8
L2-L4	Mean	5	77.8	70.0	-9	0	82	62	-24	3.4
	SD		6.3	4.2			7	5		0.6

A = preinjection value; B = lowest value at 30 min; vasopressor = number of patients requiring vasopressive therapy.