

Certainly, there continues to be a place in clinical medicine for the application of intelligence, skill, judgment, and experience, without the necessary involvement of a prospective randomized study, however desirable it may seem. Dr. Chalmers is to be reminded that the radiologist and surgeons involved in this experience are in total agreement about the value of percutaneous drainage of abdominal abscesses; therefore, bias of training or discipline does not exist. Furthermore, the experience was obtained primarily at a Veterans Administration medical center, which should help to dispel his concerns about the profit motive.

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*To the Editor:* Dr. Chalmers suggests that both the radiologist and the surgeon attempt to establish territorial claims that one — and not the other — provides better therapy for abdominal abscesses, and that controlled trials could settle the controversy.

Unfortunately, abscesses vary so greatly in many ways that studies with proper, randomized controls would be very difficult to establish. It is far more likely that further experience will lead to greater concurrence between radiologists and surgeons. Thus the letter by Haaga et al. outlines conclusions that appear to be quite closely in accord with our own studies in the Massachusetts General Hospital. Since Haaga and his co-workers originated the radiologic method, their opinion must be given great respect.

Ultimately, in addition to the well-known physical signs of abscesses, wider application of the CT body scan together with ultrasonography should lead to diagnosis of these important deadly complications in a very high percentage of cases. Whether radiologists can provide adequate therapeutics in 70 per cent or over 90 per cent of cases will be much clearer in a relatively short time. Meanwhile, an abscess is only one of many complications that can occur, particularly in postoperative patients. Personal responsibility for care of the patient must be retained by the surgeon.

In the quotation begun by Dr. Chalmers, perhaps the Bard was referring to the dangers of divided responsibility when he wrote what could be a patient's final comment: "A plague o' both your houses! They have made worms' meat of me. . . ."

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## UNSUSPECTED BENZYL ALCOHOL HYPERSENSITIVITY

*To the Editor:* Benzyl alcohol has weak local anesthetic and antipruritic properties and is the most common bacteriostatic agent found in premixed injectable drugs and in diluents used for the reconstitution of parenteral medications.<sup>1</sup>

We recently evaluated drug hypersensitivity in a 55-year-old man who had had sudden onset of fatigue, nausea, and diffuse angioedema shortly after an intramuscular injection of vitamin B<sub>12</sub> containing benzyl alcohol as a preservative. These symptoms had also been noted by the patient when three such injections were administered

over the preceding six years, after total gastrectomy for the Zollinger-Ellison syndrome. Similar symptoms had occurred on two occasions during the previous 20 years, after injections of penicillin.

Skin tests were performed with several preparations of vitamin B<sub>12</sub> and diluents. Responses to skin-prick testing were negative. However, a wheal-and-flare response developed 15 minutes after intracutaneous injections of vitamin B<sub>12</sub> (1 mg per milliliter) with benzyl alcohol (0.9 per cent) and normal saline containing benzyl alcohol. There was no reaction to the same concentration of vitamin B<sub>12</sub> containing a paraben bacteriostatic agent or to vitamin B<sub>12</sub> without a preservative. Subsequently, 1 mg of vitamin B<sub>12</sub> without a bacteriostatic agent was administered parenterally, and no allergic symptoms developed.

Contact dermatitis secondary to parabens is frequently encountered.<sup>2</sup> (Parabens are the C<sub>1</sub> through C<sub>4</sub> alkyl esters of parahydroxybenzoic acid, such as methyl paraben.) Similar reactions have also been noted with benzyl alcohol in perfumes.<sup>3</sup> Lagerholm et al. reported the occurrence of urticaria in a patient who received several injections of vitamin B<sub>12</sub> preserved with benzyl alcohol.<sup>4</sup> These symptoms were not seen when the vitamin was administered without a bacteriostatic agent.

Contact dermatitis due to drugs can often be confirmed by patch testing and the appearance of a response one or two days later. This delayed hypersensitivity reaction is generally associated with sensitized lymphocytes.<sup>5</sup> The rapid onset of symptoms noted in our patient, as well as the positive, immediate skin-test response, suggests reaginic hypersensitivity due to IgE antibodies. Confirmation by passive transfer was not attempted because the patient had had hepatitis.

Although benzyl alcohol is commonly used in multidose injectable pharmaceuticals, the hypersensitivity associated with it occurs extremely rarely or is not documented when it does occur. Conceivably, some allergic reactions attributed to commonly used drugs such as penicillin may actually be caused by the unsuspected presence of a bacteriostatic agent.

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## AVOIDING SPHYGMOMANOMETER-CUFF "HYPERTENSION"

*To the Editor:* In view of the importance of an appropriate cuff size in the indirect measurement of blood pressure, the more simplified recommendations of the American Heart Association (1980)<sup>1</sup> are very welcome. Making sure that the inflatable bladder covers approximately 80 per cent of the arm's circumference is more readily accomplished than ensuring that the bladder's width exceeds the arm diameter by 20 per cent — the previous recommendation (1967).<sup>2</sup>

The Association's criteria accept coverage of the circumference by the bladder that is as low as 75 per cent before they advocate the "large adult" or "thigh" cuffs. According to this standard, the "range" imprinted on many cuffs is overly generous. For example, one standard-size adult cuff with a bladder 12.5 by 25.5 cm is marked with a range of air circumference up to 41.0 cm. Under the new standards, this cuff should not be used on any arm exceeding 34.0 cm in circumference. To ensure 75 per cent coverage of the cir-