a potential confounder for the interhospital comparisons.

7. Interhospital comparisons in article 2. In article 2 an attempt was made to isolate those determinants of the surgical wound infection rates that would explain the marked interhospital differences. Dr. Haley argues that this variability among the hospitals is probably explained by "differences in the sensitivity of the diagnoses of wound infection" in the various hospitals. This argument is extremely unlikely in view of the findings listed in Table 1 of the second paper: The same hospital, surveyed by the same nurse, was found to have a high infection rate in one type of operation relative to the other hospitals and a comparatively low rate in another. This variability was true in all the participating hospitals. This indicates that the same surgical teams may perform with varying degrees of success as far as wound infections are concerned in the various operations that involve different surgical techniques. This finding cannot be explained by one nurse diagnosing more infections than her counterpart in another hospital, as suggested by the editorial.

The use of drains in hernia operations was found to be the main risk factor for developing an infection. When adjusting for the effect of the four main risk factors in these operations, the differences among hospitals disappeared in all but two hospitals. The reasons behind the residual high risk in one hospital were discussed in the last paragraph of the Discussion in article 2. For the other hospital we could find no explanation.

As far as we know we never abandoned the interhospital comparisons in our second paper. The use of a model to separate the hospital effect from other risk factors is not a new technique. The finding that the hospital effect disappeared for 9 of the 11 hospitals after adjusting for the four main risk factors means that these factors contribute to the interhospital differences. Hospital comparisons were also made regarding the rate of use of drains, where marked differences were found controlling for the type of patient. This initiated a dialogue with the surgeons that resulted in initiating a clinical trial to evaluate the benefit of using drains in this type of surgery.

We would unreservedly agree with one of Dr. Haley's last statements that "no study is perfect" but would add the rider that "nor is any criticism."

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Oxacillin-Resistant *S aureus*

To the Editor:

What is the significance of *Staphylococcus aureus* cultures reported as resistant to oxacillin? The literature refers to methicillin-resistant S *aureus,* ie, MRSA.

Harry J. Silver, MD
Los Angeles, California

This question was referred to Peter N.R. Heseltine, MD.

Methicillin-resistant S *aureus* were first reported in Europe during the 1960s and are now an important cause of nosocomial cross-infections in patients hospitalized at tertiary care facilities in the United States. The only reliable therapy for such infections is vancomycin, which is both expensive and offers some potential for toxicity. There is some evidence that MRSA is spread from patients who are carriers of the organism (ie, asymptomatically colonized) to others: California has enacted some regulations regarding the transfer of MRSA culture-positive patients to skilled nursing facilities to minimize such transmission.

Oxacillin and nafcillin rather than methicillin are widely used in the United States by clinicians, and in response many laboratories now use oxacillin or nafcillin powder or disks to test the susceptibility of clinical isolates. (Methicillin susceptibility disks may also be more likely to deteriorate in storage than disks made from the other two antistaphylococcal penicillins.) MRSA are resistant to methicillin through intrinsic genetic mechanisms, rather than plasmid-mediated factors, which also render them resistant to most if not all beta-lactams, including other penicillins (eg, oxacillin and nafcillin) and most cephalosporins. The National Committee on Clinical Laboratory Standards (NCCLS) recommends that S *aureus* isolates that test resistant to methicillin or oxacillin or nafcillin be reported as resistant to all three agents. Because cephalosporin disk susceptibility tests of MRSA isolates do not correlate with clinical outcome, the NCCLS also recommends that MRSA be reported as resistant to cephalosporins. Thus, oxacillin-resistant S *aureus* must be considered equivalent to MRSA.

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Correction

Two errors have been found in the article "Sample Size for Prospective and Retrospective Studies: The 2 × 2 Table" (Statistics for Hospital Epidemiology, December 1988). In the footnotes for Figures 1 and 2 (pp 564-565), "type II error" should read "type I error." Also, the title for Figure 2 should read: Sample size curves for *retrospective* studies. These figures are correctly discussed in the text (p 563). The authors and editors regret any inconveniennce the errors may have caused.

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