treatable with standard mycobacterial chemotherapy), and groups 2a and 2b (difficult to treat with usual mycobacterial therapy).

Functionally, this seems to be a practical way for clinicians who do not frequently encounter these many microbes to keep track of the clinical importance of isolates. However, I am concerned about the predictable overlap of the old classification system of Runyon with this new system. Specifically, I am worried about the confusion that predictably will develop between the older designations of groups I-IV (Runyon) with the new groups 0-3 (Bailey). Therefore, to reduce the potential for confusion in communication, I would suggest that the newer system advocated by Bailey be grouped only by the functional, descriptive designations: Mycobacterium: nonpathogenic, Mycobacterium: easy to treat, and Mycobacterium: difficult to treat. Underlying this proposal is the notion that for most clinicians who do not regularly encounter such microbes, this series of designations will function to direct their diagnostic and therapeutic considerations to more detailed literature which will indicate the specifics of management in each instance.

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To the Editor:

Dr. Isemann’s comments regarding form following function are perceptive and his suggestion that an alternate classification system be grouped by functional descriptive designations only is consistent with our intent. Our classification system was in no way intended to replace the Runyon classification system which serves an entirely different and very important purpose. By limiting this new system, we hope confusion with the older system can be avoided. However, recognizing the propensity for individuals to abbreviate any system, numbering or lettering each category may still be necessary. Using letters such as "A,", "B,", and "C" would miss the obvious advantage of having the nonpathogenic mycobacteria included under such a descriptive category as category "O." Using abbreviations such as "O" for nonpathogenic mycobacteria, "E" for easy to treat, and "H" for hard to treat would be quite descriptive, but in a sense does not effectively communicate everything necessary. For instance, it is really not correct to say that treatment for 18 months with INH, rifampin and ethambutol is in fact easy, particularly when one is dealing with a patient who is not very enthusiastic about long-term compliance. As we learn more about newer drugs, some of the organisms presently categorized as difficult to treat could very well become quite easy to treat with nonstandard mycobacterial regimens. Certainly information gleaned from patients with the acquired immunodeficiency syndrome and disseminated M. avium intracellularare infection would indicate that some newer drugs may be effective. Examples are the rifampin analogue ansamycin, the antileprosy drug clofazimine, the alpha lactam antibiotic thienamycin, the aminoglycoside amikacin, and perhaps even beta lactam antibiotics such as cephalosporins and ampicillin. While information in this area remains anecdotal, it is sufficient to give us hope for finding an effective regimen in the future. No system is perfect, and abbreviations become even less perfect, but two strictly functional classifications using the following abbreviations might be considered:

- O—Mycobacterium nonpathogenic
- S—Mycobacterium responding to standard antituberculosis therapy
- N—Mycobacterium requiring nonstandard antituberculosis therapy

or

- O—Mycobacterium nonpathogenic
- P—Mycobacterium pathogenic

Reduced Functional Residual Capacity  
and Severe Head Injury

To the Editor:

Drs. Cooper and Boswell reported that many patients with severe head injury had high levels of venous admixture (Qv/Qt) associated with a reduction in functional residual capacity (FRC). Although they found similar values of FRC and Qv/Qt among all subgroups of patients, we believe it is difficult to relate the reduction of FRC observed in their study with head trauma, since there were patients with abnormalities of the chest roentgenograms and other associated lesions as major trauma that could explain the reduction of lung volume. It would be very interesting to know the results of the group of patients with normal findings on chest roentgenograms and isolated head trauma in order to observe if the reduction of FRC persists.

The magnitude of FRC reduction is not clear, because the authors said that the mean FRC was 68 percent of the value predicted for the upright position while they used reference values for women in the sitting position and for men in the semirecumbent position. In fact, the percentage of the predicted value was not correct for the three women, and to our knowledge, there are no reference values for women in the semirecumbent position.

Our findings in 11 patients with isolated head trauma and spontaneous ventilation did not support the idea that there is a severe reduction of FRC in head trauma patients. The patients had a mean age of 27 years, ranging from 17 to 45 years. Seven patients (64 percent) required craniotomy and our data were obtained 48 to 72 hours after admission. Their mean Glasgow coma score was 6. All of the patients had normal findings on chest roentgenograms. The mean FRC in the supine position was 1.84±0.4 L (SD) which represented 81 percent of the predicted value. The arterial Po2 breathing room air was 75±16 mm Hg. Only four patients had an arterial Po2 lower than 70 mm Hg.

The occasional arterial hypoxemia observed in patients with isolated head trauma and normal chest roentgenographic findings can be attributed predominantly to a mismatch of ventilation and perfusion. The reduction of FRC probably plays a minor role. At the moment no direct evidence of abnormal closure of small airways has been demonstrated.

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REFERENCES