Nosological and diagnostic sensitivity and specificity of the test for antibodies to neutrophil cytoplasmic antigens (ANCA)

used to assess the likelihood of disease according to the result of the test so long as the probabilities of disease in the diagnostic setting and in the patients studied for the paper are similar.

On the other hand, nosological values of sensitivity and specificity are of limited direct relevance to the practising physician, who would need to convert these probabilities to the clinically relevant probabilities using Bayes's formula. This conversion is to a large extent dependent on the prior probability of disease in the clinical population studied and this is rarely known. There is a lot to be said for collecting data in a realistic clinical setting, as the authors have done, and quoting diagnostic specificity and sensitivity, rather than evaluating a new test in a group of patients who are known to have the disease in question and comparing this with the results in a group of normal people. In these circumstances the nosological value would be more appropriate.

Taking the bright, coarsely granular pattern as positive, the authors found that the result of the test was positive in 18 patients with Wegener's granulomatosis and in three who did not have the disease. The result was negative in five patients who had active Wegener's granulomatosis and in 214 other patients, in most of whom, from the limited details given, Wegener's granulomatosis might have been initially suspected but was not subsequently confirmed. On the basis of these figures (table) the nosological sensitivity is 78%, the nosological specificity 99%, the diagnostic sensitivity 98%, and the diagnostic specificity 86%. It would seem that the authors have quoted the nosological sensitivity with the diagnostic specificity. I would suggest that it would be more appropriate for them to have quoted the diagnostic sensitivity of 98%—which, as an added bonus, looks even better than the quoted sensitivity of 78%.

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Author’s Reply. I am grateful for the clear explanation of nosological versus diagnostic sensitivity and specificity. In our report we aimed to show primarily the significance of a positive result in the test for antibody to neutrophil cytoplasmic antigens as a diagnostic aid for Wegener's granulomatosis. A sizeable proportion of biopsy proved cases, however, were antibody negative—hence our reluctance to quote a diagnostic sensitivity, or negative predictive value, of 98% because of the danger of a delay in diagnosis as a result of undue weight being attached to a negative result. Prompt diagnosis and early treatment are essential to prevent long-term complications in Wegener's granulomatosis, and negative laboratory results should not be assumed to exclude the diagnosis if there is persistent suspicion on clinical grounds.

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Book notices


In recent years the comprehensive textbook of general medicine, aimed at the practising physician, has made a dramatic comeback—largely, I suspect, being used for a brief overview of areas outside the everyday experience of the reader. But this reviewer realises that over the same period he has relied very little on the larger textbooks in his own speciality of respiratory medicine. This new multi-author textbook presents over 2000 double columns pages of information in two volumes (but there are two larger North American multi-volume textbooks on respiratory medicine).

The contributors are well known academic leaders in their subjects, mainly from the United States but with representatives from England, Canada, and Australia. About one third of the textbook is devoted to basic science and techniques and the remainder to clinical topics, which are arranged separately under conventional headings but with
some useful shorter chapters on the general approach to
diagnosis in given areas. Many of the sections and chapters
are small monographs in their own right: 150 pages are
devoted to respiratory physiology (and a further 70 to
pulmonary function testing) and 50 page chapters to viral
infections and mycobacterial disease, all backed by extensive
bibliographies. The layout and illustrations are in general
admirably clear, though some radiographs fail to make their
point in reproduction. This impressive textbook sets out the
enormous information base now available in respiratory
medicine, which the patient hopes underpins our approach to
practical diagnosis and management. If this increase in basic
information is followed by a similar scale of advance in
treatment, subspecialisation cannot be far over the horizon—
NBP

**Chest Medicine.** TW Evans, M Crockford. (Pp 187; £6.50.)

This little book (about 5 × 7 inches) forms part of the
“Colour Aids” series and aims to provide a basic text on one
side of each page with, usually, three or four illustrations on
every facing page. The book is intended to cover respiratory
medicine at a level suitable for senior medical students, junior
hospital doctors, and allied professionals. The text is well laid
out with wide margins containing clear headings, but this
does mean that most of the subjects need at least five pages
and one tends to lose one’s way a little when concentrating on
one subject. This arrangement also means that the book has
had to be liberally supplied with pictures of patients,
radiographs, equipment, pathological specimens, and hist-
ological sections. The main weakness is the tremendous
variability in both the quality and the suitability of the
pictures. Though many are excellent there are also some that
are either of poor quality or totally inappropriate for the
intended readership—for example, a radiograph from a
patient with MacLeod’s syndrome suddenly appearing in the
section on chronic obstructive pulmonary disease, many
unexplained photomicrographs, and some very strange
examples of a normal chest radiograph, simple pneumo-
thorax, and miliary mottling. The unenlightened student is
likely to remain unenlightened after consulting the appendix
on normal lung histology, which shows two pairs of unlabelled
photomicrographs at different powers. Although there
is much that one might quibble with, the basic idea
seems a good one for student readers and many respiratory
physicians will undoubtedly buy several copies for the junior
members of their team. It would probably be advisable to
flick through the book before placing a large order in case the
format or some of the pictures proved too irritating. It is to be
hoped that the book will be popular enough to demand a
reprint and an opportunity to review some of its “colour
aids.”—JEH

**Correction**

**Ventilation-perfusion mismatching in acute severe asthma:
effects of salbutamol and 100% oxygen**

In the paper by E Ballester et al (April 1989;44:258–67) in the
legend to figure 2 on page 263, penultimate and last lines, the
symbols are reversed: ● — — — — ● should be “per-
fusion” and ○ — — — ○ should be “ventilation.”