

Letters to the Editor

In Dr Warren's article: "The Bacterial Load in the Nasal Mucosa of Chinese Patients" (Warren, 1973), in which she makes some valuable observations, there is one statement which I wish to challenge. It reads: "Attempts at examination of noseblows *did not yield any useful information*, as the bacillary load (in the noseblow smears) was always much lower than in the nasal smears" (i.e. those made from nasal mucosa scrapes) [italics and brackets—J.C.P's].

In recent years, I have personally examined smears of noseblows for the presence of leprosy bacilli in more than 700 patients with all types of leprosy. A report of 322 of these patients is given in a former paper (Pedley, 1973). In my opinion the finding of a positive noseblow smear for *Myco. leprae* in a lepromatous patient undergoing early treatment, *always* yields valuable information for the following reasons:

(1) The disparity between the bacillary load in a noseblow smear and a smear made from a nasal mucosa scraping (to which Dr Warren refers) can readily be deduced from the noseblow smear. For, a positive noseblow smear yields the information that the load of bacilli in the nasal mucosa membrane is so great that the phagocytes are unable to prevent the escape of bacilli into the nasal secretion. This important observation was made by Harman, following an extensive study of nasal mucosa biopsies which I sent him from Nepal, and it is recorded in a previous paper (Pedley, 1973).

(2) Noseblow smears which are positive for *Myco. leprae* yield information on the state of a patient's infectivity which it is *essential* to know. Rees has shown that a single noseblow may contain millions of morphologically normal bacilli. This finding, coupled with another (Pedley, 1970a, b), serves to emphasize the importance of the information which positive noseblows yield. In a prolonged search of one million consecutive microscopic fields of lepromatous skin it had been shown that leprosy bacilli rarely (if ever) emerge from intact skin. This being so, it is the *noseblow* smears which provide the *true* information (and not the skin smears) as to whether a patient is infectious or not. If the noseblow smears do not contain morphologically normal bacilli, then the patient is *not* infectious. The noseblow smears are the true index of a patient's *infectivity*, whereas the skin smears are an index of the *activity* of the disease.

(3) Finally, such observations as: (a) whether the bacillary load in the noseblows is less than that in the nasal mucosa, or (b) whether the M.I.% of the bacilli in the nose is generally higher than that in the skin, or (c) whether the nasal mucosa is the site where the bacilli first make their appearance, and from which they disappear last, are all valuable in themselves, but in the final analysis the most important consideration of all is: *Are bacilli being shed from the nose in the mucoid discharge?* If so the patient must be regarded as contagious until he ceases (as a result of treatment) to discharge morphologically normal bacilli in the noseblows. In my experience this generally takes between 4 to 6 months.

Thus, a careful check, periodically, on the noseblows for the presence of *Myco. leprae* in a patient suffering with lepromatous leprosy, especially during the first 6 months of treatment, is highly desirable for the information it yields as to whether the patient is infectious or not.

Mongar General Hospital
(TLM), East Bhutan

J. C. PEDLEY

References

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 "The value of scrotal biopsy in leprosy"
Lepr. Rev. **45**, 145-152.

I was most interested in this article on the scrotum, and wonder if you will allow me to raise two points for discussion, arising out of our experience with this tissue in Oxford?

In their introduction, I see that the authors have the impression that bacilli *in* muscle have been emphasized in the article they quote. In the case of human striated muscle, however, I am sure that most authorities would agree that even where bacilli are reported *in* fibres, they are almost invariably much commoner *between* fibres, and in interfascicular macrophages. This is certainly the case in our histology.

Secondly, I wish to record disagreement with their statement that: "A stained smear obtained from scrotal skin homogenate is recommended for bacteriological diagnosis as a superior method than routine skin smears or nasal scrapings."

In a very preliminary count of the last 20 consecutive patients for whom we have had multiple biopsies, following various periods of treatment, the scrotum has in fact proved negative on no fewer than 8 occasions, when skin and/or peripheral nerve biopsies were positive.

Quite apart from this, I feel it would be extremely unfortunate if any of your readers gained the impression from this article that they should set aside the use of routine slit-skin smears (or properly carried out skin biopsies, *taken from a lesion*), in favour of incising the scrotum with a knife for the purpose of obtaining a smear. In many parts of the world this approach is unpopular and even feared by the patient. With respect I would doubt the wisdom of recommending it under any circumstances as a routine, though it may clearly be of value for research purposes.

University of Oxford,
 Department of Human Anatomy,
 South Parks Road,
 Oxford, OX1 3QX

COLIN McDUGALL