Dear Editor

The performance of mini Wright peak flow meters after prolonged use

I read with great interest the article of Miles et al. (1) about the performance of mini Wright peak flow meters after prolonged use. We performed a study (2) comparing the reliability of five new mini Wright peak flow meters before and after 10 000 compressed air impulses of about 450 l min⁻¹ flow, controlled by an electronically driven magnetic valve. There were no significant deviations of peak flow values read from the mini Wright peak flow meter before and after the 10 000 impulses compared to those controlled by a pneumotachograph. Comparing our observations with those of Miles et al., we conclude that changes in reading of mini Wright peak flow meters after 1 yr may not be due solely to multiple actuations or age of the devices, but probably also to other factors such as the influence of repeated and rigorous washing. I totally agree that checking patients' peak flow meters after prolonged use is recommended.

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References

Reply to Dr Niggemann

We thank Dr Niggemann for drawing our attention to his/her work showing that mini Wright meters were reliable with repeated laboratory testing up to 10 000 times. This is in agreement with our work that, in general, these meters are extremely reliable and can, after 13 yr of use, which might involve a similar number of test blows, still be found to give unchanged readings. We believe that the simple act of using the meter is unlikely to lead to changed readings over time, and, as we comment in our paper, it is how the meter is treated in the home and working environment which is much more important with respect to long-term reliability. Unfortunately, these aspects of care for the meters are difficult to control and monitor.

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Dear Editor

Bovine TB in badgers: a reappraisal of aetiology and pathogenesis

The badger culling component of the Ministry of Agriculture's cattle bovine tuberculosis eradication programme has been controversial from the outset. But perhaps the greatest obstacle to progress has been the fundamental lack of data on TB transmission routes and disease development in both badgers and cattle: aetiology and pathogenesis. This is particularly unclear as regards badgers since, until recently, there have only been limited studies or experimental transmission, and gross pathology, together with some live clinical sampling: experiments (1,2); pathology (3-6); clinical (7,8).

The conclusion of such studies is that 82% of badger TB may be of respiratory origin, and 18% due to bite wounding, with an important but unquantified sow to cub transmission element (7,8). It remains unclear how the cub transmission actually occurs; it may be either trans-placentally, via lactation, i.e. by vertical or pseudo-vertical transfer (as in cow to calf), or via close sow/cub contact within the set. Whatever the route, even 6-month-old cubs may have acute TB. This renders any vaccine strategy unlikely to succeed, since cubs are unreachable for the first 8 weeks of life underground.

The respiratory and bite wounding routines would seem to be an oversimplification in the light of recent studies which sampled lymph nodes (6,9). These would suggest that early and late TB may be separable (see Table 1), such that single-site or multisite lesions indicate route of acquisition and subsequent pathogenesis. Lung and kidney disease would seem to be typical of late TB, and both are predilection sites which occur in most late pathology studies (1). Even an experimental thigh injection may rapidly become a lung case (2). The lungs may be prone to