compressor. A smaller proportion specified the use of an exhaust device. Ribavirin and colistin were used most frequently without an exhaust device. Only one of seven consultants used pentamidine without an exhaust device. All these drugs were given on occasions without any exhaust device being used.

Thus, nebulized antimicrobial agents had been prescribed by a significant proportion of consultant physicians and paediatricians, but by fewer geriatricians. This use potentially exposes hospital staff, patients, visitors, and home carers to health risks caused by waste aerosol, and possibly an increased risk of infection (3-6). Dosages prescribed for colistin, the drug most commonly used in this way, varied eight-fold, but the doses of other agents used seem to be more standardized.

Unnecessary exposure of health care staff to waste aerosol could be reduced by the wider use of exhaust devices, but simple measures such as regular checks of equipment connections and seals, and use of separate treatment rooms should not be overlooked.

In addition it would seem sensible that manufacturers and clinicians should recognize that these agents are sometimes used in unlicensed ways, collaborate to produce formulations for use in nebulizers, and specify appropriate treatment regimes and safety precautions.

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References

Dear Editor

Cattle TB: ‘VL, open’ cases . . . or ‘NVL, non-infectious’ cases?

There seem to be two schools of thought on the issue of cattle TB, and yet it is one of critical importance in tackling the final stages of tuberculosis eradication schemes. On the one hand it is claimed that only cattle with gross ‘visible lesions’ (VL) at abattoir inspection are capable of passing TB on to other cattle (1–4).

This view is not substantiated by other studies of cattle aetiology and pathogenesis. Most TB in adult cattle starts as a lung infection of respiratory aeroogenous derivation via aerosolized ‘sputum’ or dust. Primary lesions may heal, but more usually they remain ‘open’, and may remain subclinically latent, or progress to chronic, or fatal and acute bronchopneumonia. Even where an apparent ‘sealed tubercle’ develops, it would seem that intra-canicular bronchiolar spread continues, such that intermittent or continuous bacterial shedding occurs in the ‘sputum’. Even cattle with micro-lesions that would be missed at gross abattoir inspection are infectious to other cattle despite being ‘non-visibility-lesioned’ (NVL) in the lungs, or VL only in broncho-mediastinal lymph nodes. Such cattle will be producing infectious faeces via swallowed ‘sputum’ (5–9). Surely it is the case that the number of cattle with TB in a herd merely reflects the period elapsed since the last ‘clear’ test, NLV or otherwise, there is spread to contiguous herds, and slurry is infectious? Pigs, other stock and badgers might catch TB from even NLV herds?

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References