Riot Control Agent

SIR,—In your leading article (7 July, p. 5) it was reported that an improvement on the riot control CS gas is on the way. It is code-named CR and, being of low toxicity but extremely irritant to skin, eyes, nose and throat, only very little would cause considerable pain and discomfort. In the article there was no expression of concern or disgust that oral LD_{50} tests were done on animals to test the toxicity of the compound. If a dose of very low toxicity can cause such acute symptoms when applied to the skin and mucous membranes it seems quite possible that doses of high, lethal, toxicity, even when given by other routes, will cause severe pain and distress.

Does medical ethics approve the use of animals in this way in testing substances which only our own folly have made necessary?—I am, etc.,

J. D. WHITTALL

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Haemolytic-Uraemic Syndrome with Pericarditis

SIR,—We were interested in the case reported by Drs. J. A. Utting and D. R. Shreeve (9 June, p. 591) of a patient with haemolytic-uraemic syndrome and pericarditis. Their statement that "no cases with prominent friction rubs due to the microangiopathy have previously been described" is not correct. In 1972 we reported[1] a case of haemolytic-uraemic syndrome and microangiopathy in a woman with a hydatidiform mole who had a strong pericardial rub and who recovered with heparin therapy. This rub also was unrelated to uraemia.—We are, etc.,

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J. M. MARTINEZ-VAZQUEZ
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1 Guardia, J., Martinez-Vazquez, J. M., and Bacardi, R., *Medicina Clinica (Barcelona)*, 1972, **58**, 41.

Renal Carbuncle

SIR,—In your leading article (14 July, p. 63) you give a number of guides to the diagnosis of renal carbuncles. May I draw attention to another useful sign which does not appear to be very well known?

Patients with this condition and with perinephric abscess can sometimes be identified by screening the kidney during pyelography. It will be found that in addition to the classical sign of alteration of the psoas shadow, there is also a loss of mobility of the kidney, which does not move on respiration in the normal fashion, presumably owing to oedema in the perinephric tissues preventing the normal excursions of the organ.—I am, etc.,

GEORGE T. WATTS

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Antibiotic Sensitivity of Klebsiella

SIR,—I should like to thank Drs. Eunice Lockey and M. W. Casewell for their reply (7 July, p. 52) to my letter, but there are still some points which I think they have not cleared up.

I am still not clear from their paper or their letter if the result of the disc test was reported to the clinician concerned, and if so how. Drs. Lockey and Casewell say that "the problems of interpreting disc sensitivity results of β-lactamase-producing organisms are well known." So they are to medical microbiologists, but I question if this knowledge is universal among our clinical colleagues, many of whom, I suspect, if told that a strain of *Klebsiella* was even apparently sensitive to ampicillin might well conclude that the infection concerned was one which was likely to respond to treatment with this drug.

Drs. Lockey and Casewell lay stress on the fact that they did no more than report that the organism *appeared* sensitive to ampicillin, and that they used the word "appeared" advisedly in view of the difficulties associated with disc-testing a β-lactamase-producer against this antibiotic. One must point out that they also reported that the organism *appeared* sensitive (my italics) to carbenicillin, tetracycline, co-trimoxazole, streptomycin, gentamicin, chloramphenicol, kanamycin, colistin, and cephaloridine. So far as I know only two of these are affected by β-lactamases.

In view of this evidently guarded attitude of Drs. Lockey and Casewell to the results of all their disc tests, would it not have been more helpful to tell us to which of these drugs they considered this strain of *K. aerogenes* really was sensitive and to which, as in the case of ampicillin, it was frankly resistant?—I am, etc.,

T. D. M. MARTIN

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Administration of Bronchodilator to Young Children

SIR,—It has always been stressed that success in the treatment of attacks of asthma with bronchodilator aerosols depends upon their proper administration—that is, the inhaled drug must reach the lower respiratory tract.

Our observations with young children in the allergy clinic at this hospital led us to believe that most of them were unable to use these aerosols in the prescribed manner. They were either unable or unwilling to co-ordinate inhalation with triggering of the aerosol container. Nevertheless, rapid therapeutic results could be obtained with these aeosols once they had been directed into the mouth irrespective of the phase of respiration.

Subsequent to these observations a trial was conducted on 40 children between the ages of 6 months and 10 years who presented with acute bronchospasm. The potent beta-adrenergic stimulant fenoterol hydrobromide (Berotec) in aerosol form was used. Each metered dose contains 200 μg of the active ingredient. The drug is recognized in South Africa for its low incidence of cardiovascular effects. Two puffs of the aerosol spray were directed on to the buccal mucosa, and in several cases on or underneath the tongue, without regard to the phase of respiration. Rapid bronchodilatation occurred in all cases, usually within three minutes. This was confirmed in all cases by clinical observation and by peak expiratory flow rate and forced expiratory volume readings where possible. No untoward cardiovascular effects were observed. This method has been found to be very useful in small children with acute asthma attacks. We shall submit a full report on our findings in due course.—We are, etc.,

S. C. SHORE
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Red Cross Children's Hospital,
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Potassium Deficiency during Treatment with Brinaldix K

SIR,—We have read the letter from Drs. R. T. Taylor and M. J. T. Peaston (7 July, p. 48) in which they describe four cases of hypokalaemia following treatment with Brinaldix K.

Brinaldix K was first marketed in 1968, since when there have been only very isolated reports of this complication. In the company literature it is pointed out that Brinaldix K has been formulated to limit the occurrence of hypokalaemia but that in some instances patients may excrete large quantities of potassium, particularly when dosage is prolonged, when there is a severely restricted salt intake, and in those conditions in which there may be aldosteronism. It is also pointed out that where additional potassium and chloride supplementation is required, Sando-K, each tablet of which provides 12 mEq of potassium and 8 mEq of chloride, is compatible with Brinaldix K in solution and they may be taken together.

In view of these reports, however, the company is actively reconsidering the situation.—I am, etc.,

E. R. EVANS
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Sandoz Products Ltd.

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Transient Synovitis and Perthes's Disease

SIR,—I would like to comment on your excellent leading article (14 July, p. 62) in which you associate transient synovitis with the development of Perthes's disease.

I feel it is important that a distinction is made between the transient synovitis which is caused when Perthes's disease is produced experimentally in animals and the painful hip of unknown origin which occurs in young children under the age of 10 and is often referred to as "transient synovitis," but is better called "observation hip" because its true aetiology is unknown.

In 1961 I investigated a series of 98 children with painful hips with the express purpose of determining whether "observation hip" could possibly be the precursor of serious hip disease in later life.[1] The average follow-up was five years and in no instance was any hip abnormality demonstrated by clinical or radiological examination when the children were reviewed.—I am, etc.,

C. P. MONTY

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1 Monty, C. P., *Archives of Disease in Childhood*, 1962, **37**, 539.