butazone and other antirheumatic drugs and perhaps indicate that new drugs should be used with caution.—I am, etc.,

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Antibiotic Discs Active against Resistant Organisms

SIR,—Antibiotic discs that give no zone or a smaller zone than expected with sensitive organisms have been encountered in antibiotic-sensitivity testing by many laboratories. If the reduced activity is common to all discs in a vial or to a complete batch of discs the error should be detected by the finding of unusually small zones with control organisms or of unusual resistance patterns with some organisms. Even if errors due to reduced disc potency are undetected they are safe in that sensitive strains are reported resistant. The error is unwelcome in that the choice of antibiotics suitable for therapy is reduced. Either such discs were impregnated with less than the correct amount of antibiotic or the antibiotic has deteriorated under adverse storage conditions. The latter is probably the reason in most cases. A more significant type of abnormal disc is that which gives a zone typical of a sensitive strain with a resistant organism. Without making any effort we have found three examples of this during the past 18 months.

(1) A strain of *Staphylococcus aureus* with a minimum inhibitory concentration of tetracycline of 128 μg/ml gave a zone of 15 mm with 10-μg tetracycline discs, while there was no trace of inhibition with 30-μg tetracycline discs. Five discs from one vial were found to give a similar effect. The inhibitory substance was not identified. The Oxford *Staphylococcus aureus* NCTC 6571 gave zones equivalent to a diameter of 36 mm with these discs in tests by the Stokes method.

(2) A strain of *Staph. aureus* with an erythromycin M.I.C. of >128 μg/ml gave a zone of 27 mm with 5-μg erythromycin discs. No trace of inhibition was found with 15-μg erythromycin discs or with 5-μg erythromycin discs from vials from the same or different batches as the faulty discs. All the discs from two vials gave this effect. The inhibitory substance was not identified. The Oxford control gave a zone diameter of 27 mm with these discs.

(3) With two strains of *Staph. aureus* with sulphamethoxazole M.I.C.s of 128 μg/ml and 256 μg/ml respectively zones of up to 18 mm diameter were recorded by several laboratories using one batch of 25-μg sulphamethoxazole discs. No trace of inhibition was observed when the same strains were tested with other batches of 25-μg sulphamethoxazole or with 250-μg sulphasomidine discs. The Oxford control gave zones of around 25 mm with these and other batches of 25-μg sulphamethoxazole discs. Differences in the antibiotic sensitivity patterns of the sulphonamide-resistant organisms that gave zones with these discs suggested that the inhibitory substance might be a penicillin. When tests were repeated adding a drop of Burroughs Wellcome penicillinase diluted 1/20 to the area of the disc the inhibition was eliminated. It therefore seems likely that the contaminating substance was a penicillin. To obtain an estimate of the amount of penicillin contaminating the discs different amounts of benzylpenicillin were added to discs from a normal batch of 25-μg sulphamethoxazole discs and the zones compared with the zones given by the contaminated discs in tests with the sulphonamide-resistant organisms. Zones similar to those obtained with the contaminated discs were given when 0·05 μg of benzylpenicillin was added to normal discs.

All of these unusual discs appeared to contain the antibiotics with which they were labelled but were contaminated by another antibiotic, or perhaps some other chemical substance. Over-impregnation with a particular antibiotic is unlikely as this would be reflected in increased control zone sizes. The incorrect sensitivity will be seen only when an organism is sensitive to the contaminating agent but resistant to the drug labelled on the disc. Sensitive organisms, including the usual control organisms, will give zone sizes typical of sensitive organisms, as did the Oxford control in the examples given above. Thus in routine sensitivity testing detection of false sensitivity caused by discs containing a contaminating antibacterial agent is unlikely.

The frequency with which such discs reach routine laboratories cannot be estimated. The onus lies on manufacturers to act on reports of faulty discs; but it is unlikely that such discs will be detected by their quality control procedures unless, by chance, one of their control organisms has the appropriate sensitivity pattern. However, it is worth while knowing that faulty discs of this type can find their way into circulation.—We are, etc.,

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Coping with Minor Casualties

SIR,—It is a pleasure to see a leading article (2 March, p. 339) dealing with basic aspects of this major problem. Effective methods of managing minor casualties unrelated to injury, and injuries not requiring hospital treatment, are absolutely essential to improvement in the hospital treatment of all the injured. An apt definition of a "minor" emergency is something that happens to other people.

In spite of the emphasis placed on it by the Platt Committee[1] and in other reports since, insufficient attention has been paid to solving this part of the problem. To relate this to shorter working hours for doctors is irrelevant, like saying that shorter hours for firemen would mean no night fire service. It is a matter of priorities and organization. Your reference to casualty attenders as "the rag-tag-and-bobtail of the medical case load" is a clear indication that attitudes which have plagued attempts to find solutions to this complicated problem have not changed.

Regional boards and others are currently authorizing the expenditure of sizeable amounts of money in an attempt to provide roadside medical care of the injured so that they can be brought more efficiently into many ill-equipped, understaffed "casualty" departments where, but for the lack of funds, the standard of treatment could be greatly improved.— I am, etc.,

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1 Central Health Services Council, Standing Medical Advisory Committee, *Accident and Emergency Services: Report of the Sub-committee*. London, H.M.S.O., 1962.

SIR,—Rightly your leading article (2 March, p. 339) emphasizes that relatively minor complaints, to the extent of some 50% of the case load, serve to overburden hospital casualty departments. With these attenders I have considerable sympathy in the light of the prevailing difficulty for such sufferers to make immediate contact with their general practitioner; a rigid appointment system for surgery attendance promotes all the greater inducement to visit the casualty department. A remark once made to me by the secretary of the Casualty Surgeons' Association was illuminating—"It is our privilege to see the people who come here, rightly or wrongly, for they are all in need of help." On many occasions inquirers have been advised by me that, in their dilemma, the hospital is the best venue for them.

In essence, the over-crowding mainly befalls the casualty officer on duty and his staff. Again correctly, your article stresses that he should be untrammeled on the employment of his special skills in the care of serious accidents and other emergencies. To liberate him from the excessive demands made on his time by trivialities I have found that the solution lies in the employment of the most junior medical member of the staff as eliminator. In the hospital service this duty cannot be delegated to a nurse or receptionist; some members of the public are too litigious for this risk to be taken. In the industrial scene the attitude of attenders is different and the medical centre of a factory, staffed by trained nursing personnel, can efficiently discharge this duty. My scheme is essentially geared to peripheral general hospitals.

The young man is positioned, during hours of peak demand, in an apartment adjacent to the main examination room. His duty is to appraise all ambulant attenders who are not transparently in a serious state. He gives such attentions as are necessary—for example, simple dressing, antitetanic measures in vogue, simple removal of eye foreign bodies, etc. He has been well briefed in human relations and he is now required to explain in kindly and courteous terms the further course to be followed, be it referral to G.P., to the casualty officer-in-chief, or elsewhere. This junior is of course available for any other duties required by his seniors. Now that we have established the propriety of consultant status for the head of this department such a young man is assured of his future promotional opportunity and will readily agree to this ostensibly rather lowly function.

Television and newspaper exhortation to trivial attenders will have little or no effect in reducing their numbers at the accident centre, justifiably regarded by the public as the place from which it is their right to seek advice at any time.—I am, etc.,

DANIEL LAMONT

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Corneal Sign in Neonates

SIR,—In resuscitating neonates we have noticed in a few a haziness of the cornea immediately at delivery which has cleared within a few hours. Most of these babies have required intubating and ventilating, often for more than 15 minutes, before establishing spontaneous respirations. The subsequent course of these babies has been one of hypotonicity for a few hours followed by hypertonicity, irritability, and in some cases convulsions. In retrospect there has been evidence of marked intrapartum hypoxia.

We have not seen haziness of the cornea