Human Tetanus Antitoxin

SIR,—I write in full support of your plea for universal active immunization with tetanus toxoid (16 December, p. 635). However, I cannot agree with your view that, until adequate supplies of human tetanus antitoxin are available for use in non-immune or doubtfully immune patients, "1,500 units of tetanus antitoxin (preceded in the usual way by a small trial dose) should be given" when wounds have not been seen until six hours or more after injury, in addition to a thorough surgical toilet. Many workers^{1,2} have now discontinued using prophylactic equine-derived tetanus antitoxin in all tetanus-prone patients, including those who have never been given tetanus toxoid, and recommend that the management of such patients should comprise adequate excision of wounds, antibiotics for five to seven days, and active immunization with adsorbed tetanus toxoid. It has further been stated that thorough wound toilet makes the use of either tetanus antitoxin made with horse-serum or prophylactic antibiotics unnecessary.³

Your leading article has rightly laid particular emphasis on the fact that in addition to failing sometimes to prevent tetanus both equine-derived antitoxin and antibiotics may cause hypersensitivity reactions. However, in support of this statement you only cite the finding of Mrs. C. A. Cox and her colleagues⁴ that in Britain about 12% of patients develop a significant reaction to antitoxin, whereas in the United States, where over two million doses of antitoxin were being given each year, it has been estimated that from 15% to 30% of persons develop hypersensitivity reactions,⁵ and Mr. H. K. Bourns⁶ states that there is some reaction in at least 35% of cases. Further, you make no mention of the danger of serum shock, which is occasionally fatal, after a prophylactic injection of equine-derived tetanus antitoxin, or of the serious neurological complications which occur. An extensive review of the published reports by Bardenwerper⁷ has revealed 130 cases of serum neuritis, with permanent neurological sequelae present in 20% of cases, and death may occur as a result of encephalomyelitis and respiratory paralysis.

In support of a previous plea you made for universal active immunization with tetanus toxoid,⁸ I presented full clinical details of two further cases of serum neuritis following a prophylactic injection of tetanus antitoxin made with horse-serum; in one patient permanent neurological complications resulted from a single test dose of only 175 units.^{9,10} Trinca's¹¹ recommendation that "bovine antisera should be used for patients showing sensitivity to horse-serum" can therefore no longer be considered valid.

But, because a prophylactic injection of tetanus antitoxin made with horse-serum is still being advocated and practised, I make no excuse for reiterating my view that adequate supplies of human tetanus antitoxin must be made available for general use in place of equine-derived tetanus antitoxin.^{12,13} Human tetanus antitoxin, which is non-antigenic in man, does not produce hypersensitivity reactions; and though it is scarce, since it must be obtained from volunteers, surely in these days when so many people, including members of the armed Forces, are being actively immunized, there should be no shortage of persons willing to donate blood,¹⁴ as has already been demonstrated in Leeds,

where human tetanus antitoxin has now been in use for some years.¹⁵

I thus find myself unable to accept the recommendation of the Advisory Group on Protection Against Tetanus¹⁶ that "in those cases in which tetanus antitoxin is indicated a horse-serum preparation will almost always be appropriate," and I therefore feel that the case against the use of equine-derived tetanus antitoxin requires restating.^{9,13} On the basis of evidence submitted, and in the knowledge that even a test dose of tetanus antitoxin made with horse-serum may result in serious neurological complications with permanent sequelae, is it not high time that equine-derived tetanus antitoxin should be banished from hospital casualty departments and doctors' surgeries?—I am, etc.,

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SIR,—Your leading article on tetanus prophylaxis (16 December, 1967, p. 635) and Mr. M. Ellis's letter (30 December, 1967, p. 806) bring to light once more the special dangers attending the treatment of wounded patients. Two points, however, must be made even more clear.

(a) That a fully immunized person (that is with three doses of toxoid, properly spaced) is adequately protected for five years or even more,¹ and therefore does not need to have any A.T.S. injections unless in very exceptional circumstances of long delay in treatment and a very severe wound difficult to clean surgically²; and

(b) That, as most of the difficulties encountered at the emergency arise from the lack of adequate knowledge about whether the patient is or is not adequately immunized, it should be made mandatory that all motorists (to begin with) should have their driving licences officially stamped with a record of tetanus immunization: initial course, and boosters.

A suggestion to this effect was submitted by me over three years ago³ and again over two years ago,⁴ but I have had no response whatever. The suggestion, if put into practice, would cover a very large proportion of the population at special risk of sustaining injuries and would highlight the importance of tetanus immunization. The risks attending A.T.S. injection are not sufficiently realized and there is often misunderstanding on the relative merits of toxoid and A.T.S.

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Improving the Psychiatric Services

SIR,—Dr. J. H. Raphael (30 December 1967, p. 806) states: "As for day hospitals, I am completely sold on their virtues and efficacy." One wonders on what basis he makes this assertion. Statistics on day-hospital achievements are hard to come by. Farndale's standard book¹ was notably short on results, and there is only a single entry under this heading in the index of the 1967 volume of the *British Journal of Psychiatry*² and none at all in the 1966 volume.

Our experience in Blackpool may therefore be relevant. A one-year follow-up on 115 day-hospital patients showed that only 24 were free of some social handicap remaining from their illness. This is hardly sufficient to make one feel "completely sold." Of course it depends what significance one attributes to the phrase "improving the psychiatric services." Who, for instance, is to be the judge of the improvement?

The 63 general practitioners who were the family doctors of these 115 patients were asked to compare the day hospital with other types of service available in the area (inpatient unit, mental hospital, outpatient clinic, private patient treatment, etc.). They rated it fifth out of eight. This group of observers were not impressed either.

This is not to say that the day hospital has no virtues. It may well have. It may, for instance, do much of what the inpatient unit does, and do it more cheaply. But this is a fairly modest kind of "improvement."—I am, etc.,

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Psychotropic Drugs

SIR,—I am concerned about the increasing ubiquity of the concept and diagnosis of "depression" in psychiatry. As Dr. I. Atkin remarks (16 December, p. 680), "conditions which are now classified as 'masked depression' were given all sorts of other labels" in the past. Is this change progressive, or may it not be like a return to the diagnosis of "fever" before differentiations were achieved? Monistic tendencies in psychiatry are fairly prevalent—for example, the monistic theory of psychoanalytical psychiatry.

Perhaps the literature accompanying and arising from the promotion of the antidepressives has caused the extended labelling of all sorts of psychiatric illness as "masked" or "atypical" depression. This literature promotes the idea that depression is everywhere, lurking behind all kinds of clinical pictures. It is of course convenient for us to have a standard approach to treatment for a standard diagnosis in a large and often vexatious section of clinical practice. "Treat for depression" can be time-saving, but the considerable psychiatric relapse rate is time-consuming, and may partly arise from the blanket diagnosis of "depression" tending to smother other important considerations which refuse to stay smothered. Is "depression" in danger of losing precise meaning and reference? Perhaps a diagnosis of "depression" and consequent use of a drug to cure