Tetanus

SIR,—Your laboratory report from the Public Health Service (20 June, p. 739) should not be allowed to pass without comment, for some useful lessons can be learnt from it.

In the 1970 list of patients the first was wounds *Cl tetani* was recovered the second and fourth had been given no prophylaxis. The third had been given one injection of tetanus toxoid but developed tetanus six days later. This illustrates once more the inefficacy of one dose of tetanus toxoid in the immediate prevention of tetanus.

In the 1970 list of patients, the first was given large doses of antibiotics but still developed tetanus. The second patient developed tetanus eight days after receiving the wound from which the organism was subsequently recovered. Antibiotics, started two days after the wound was inflicted, cleared up the pyogenic infection but failed to prevent the onset of tetanus; clearly this patient had put himself at risk by delaying treatment. This patient was known to have had one injection of antitetanus serum on a previous occasion, and this was given as one of the reasons for withholding the serum in the treatment of the established disease. As I have pointed out,¹ one injection of A.T.S. puts a patient at risk almost for ever from any subsequent wound, and it was strongly recommended that after the giving of an injection of A.T.S. the patient should be strongly persuaded to return for active immunization by a full course of tetanus toxoid injections.

The efficacy of active immunization is well shown by the very first patient recorded in 1969, where, in spite of large numbers of *Cl tetani* being recovered from the wound, previous active immunization together with a booster dose completely prevented the onset of tetanus.—I am, etc.,

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REFERENCE

- 1 Ellis, M., *The Casualty Officer's Handbook*, 3rd edn., Butterworth, 1969.

Emotional Factors and Colitis

SIR,—In your leading article (20 June, p. 682) you quote two epidemiological studies showing that in groups of patients with ulcerative colitis and regional ileitis emotional factors did not enter the picture as a significant aetiological component. In the larger study¹, of a group of 158 patients with ulcerative colitis, this judgement was based on the fact that events considered to be disruptive emotionally or psychologically were no more frequent in the patient group compared with the control group. Events such as moving home or changing employment in the period before admission to hospital were those considered to be disruptive.

While acknowledging the value of this research with its method of delineating a stressful event, it should be emphasized that this concentrates only on one of two broad classes of emotional crisis, which Caplan² has called the accidental crisis. There exists, however, a second type of crisis, which can only be adequately defined in the light of psychodynamic theory. This is the develop-

mental crisis, in which the individual undergoes psychological or personal adjustment, but while this is occurring requires to come to terms with the psychological traces of a previous failure situation in his upbringing or development.

Two significant factors about this process are, firstly, that it often takes place at a time when the external environment is supportive or quiescent and, secondly, that it is usually accompanied by exacerbation of symptoms. Many patients suffering from psychosomatic diseases show such developmental crises, though these are rarely completed satisfactorily in the chronic cases. Such an explanation accounts for the occurrence of such things as a migraine attack at weekends.

Unfortunately such phenomena are not easily investigated by epidemiological methods, and much research remains to be done into their further elucidation with a view to psychological treatment. It would seem wrong, however, to imply that because an investigation into recent stresses proves negative there is unlikely to be a psychological element in causation. In fact one would expect recent stress to be less, bearing in mind the above explanation.—I am, etc.,

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REFERENCES

- 1 Monk, M., Mendeloff, A. I., Siegel, C. I., and Lilienfeld, A., *Journal of Chronic Diseases*, 1970, 22, 565.
- 2 Caplan, G., *Principles of Preventive Psychiatry*, London, Tavistock Publications, 1964.

Hazards of Giant Hogweed

SIR,—Dermatitis due to *Heracleum mantegazzianum*, the giant hogweed, has been infrequently recorded in British medical literature. Nine boys were seen at the Royal Hospital for Sick Children, Edinburgh, on the weekend 20-21 June, with varying degrees of erythema and blistering of the exposed areas of arms, hands, and legs, due to contact with the plant and subsequent exposure to sunshine. In the summer of 1968 two adults were seen with similar extensive lesions at the department of dermatology, and two further cases in young boys. In some patients the blistering was severe, and one child required hospital admission.

Heracleum mantegazzianum is an umbelliferous plant, probably perennial, which grows rapidly each year to a height of 12-15 ft. (4-5 m.) and spreads quickly. The leaves are large, pinnately divided, with hundreds of white flowers in umbrellalike masses at the top. The stem is hollow, and the cut section exudes photosensitizing sap containing furocoumarins.¹ Exposure to long-wave ultraviolet light, usually in the form of sunshine, results in an exaggerated sunburn reaction, which usually begins to appear after some 24 hours. Residual pigmentation is often particularly common. This plant is spreading rapidly, and is now constituting a public health hazard. Almost unknown before 1930 in Scotland,² it is now common especially in urban and suburban areas, waste ground adjacent to housing sites, along rivers, roads, and railways. It is in public parks. Similarly it is much more

widespread in England than ever before. Planting in gardens has recently been recommended,³ but this statement was retracted⁴ after a paper published in 1968.⁵ Many people are at risk, and it is most attractive to children.

Control of the giant hogweed is difficult. M.C.P.A., T.B.A., and 2,4-D are probably the most effective herbicides, but expert advice would be required. It is essential that gloves are worn by those who cut down the plants.⁵

Some family doctors are familiar with this form of photodermatitis and will see cases each year. The public health authorities, however, must be made aware of the extent and dangerous spread of the giant hogweed—and parents and children warned. A paper giving more details is in preparation.—We are, etc.,

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- 2 Perring, F. H., and Walters, M. S. *Atlas of the British Flora*, 1962, Nelson, Edinburgh. Map B 311/2.
- 3 Ingwersen, W. *Gardeners' Chronicle*, 1968, 163, No. 20, p. 11.
- 4 Ingwersen, W. *Gardeners' Chronicle*, 1968, 163, No. 26, p. 24.
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Adenoid Chest Syndrome

SIR,—During the last two years I have encountered four children under 7 years of age who were initially referred for evaluation of heart murmurs. Each child had a history of chronic, non-specific upper respiratory tract infections, and on examination had moderate degree of pectus excavatum, hypertrophied tonsils and adenoids with high arched palate, cervical lymphadenopathy, some degree of conductive deafness, and an insignificant systolic murmur at the left sternal edge. Chest radiograph (postero-anterior view) and E.C.G. were normal. Removal of tonsils and adenoids was followed by the disappearance of both the murmur and the chest deformity within one year.

The murmur can easily be explained by the displacement of the heart, but it is more difficult to establish the cause of the chest abnormality unless one postulates recurrent pulmonary collapses, presumably due to chronic airway obstruction. This association may explain the "funnel chest" in some older children, which is often stated to be of "congenital origin."

Judging from discussions with E.N.T. colleagues, sternal depressions are sometimes seen in children with hypertrophied tonsils and adenoids, but I have been unable to find references relating to the course of events after their removal, and would, therefore, welcome comments.—I am, etc.,

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