Case 2 (illustrated).—This patient, an infantryman, was referred to hospital because of aching in both legs and both feet, attributed to varicose veins. He had had no previous trouble, was engaged in a course similar to that of Case 1, and was not a recent recruit. He had no varicose veins, but there were 13 small herniae of the right and 4 of the left leg, all situated over the tibialis anticus muscles. All were reducible, and all disappeared when the tibialis anticus muscles were contracted.

Case 3 (illustrated).—This patient was referred to hospital because of varicose veins. He also was an infantryman and not a recent recruit, and he complained of a "heavy feeling" of the right leg when running. This was first noticed two months previously after a football match, and at that time he observed a small swelling on the front of the leg. Recently he had been taking part in cross-country runs for the first time, and after one run noted the appearance of a second swelling. He had no varicose veins, but there were two small muscle herniae over the tibialis anticus, differing in no way from those in the other two cases.

Discussion

The pathology of muscle hernia is discussed at length by Ihde in his article, and there seems to be no reason why the origin of the small multiple herniae we have found should differ from that of the larger ones which he describes as due to severe strain, with hypertrophy of muscle and weakening and splitting of a previously deficient muscle fascia, as distinct from those which follow direct injury. The only condition with which these small herniae might readily be confused at first sight is varicose veins, but on closer examination the diagnosis is fairly obvious.

One reference only has been found to treatment of a small hernia in this region. Schmier (1937) describes the case of a runner with bilateral herniae over the tibialis anticus muscles, but he does not state the size of the swellings. However, as the man was first seen at a varicose veins clinic they were probably small. Both herniae were treated with repeated injections of sodium morrhuate. This allowed return to strenuous activity without discomfort for a year, when further injections were required to relieve the returning pain; it is doubtful, however, if this method would be suitable for multiple herniae. In the cases we have seen, apart from suggesting modification of duty, no treatment was advised, as the men complained of pain only after strenuous cross-country journeys; otherwise they were fit for all ordinary duties.

It may be that on account of their rarity these multiple small muscle herniae of the lower leg are of no great significance. On the other hand, having seen three cases within a few weeks in soldiers undergoing intensive training we considered them of sufficient interest to warrant a brief report.

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Medical Memoranda

Mantoux Test versus Patch Test

Several papers have been published in recent years on the detection of tuberculous allergy by the patch test. In Monrad's (1936) series of positive Mantoux reactors 5% were negative to the patch test; in Wolff and Hurwitz's (1937) series 1.8%; in Vollmer and Goldberger's (1937) less than 1%; Hart's (1938) first series had 3%, and his second (1941) less than 2%, while Court's (1939) series had 2%. Camille Kereszturi (1941), however, showed that 15% of his positive Mantoux reactors were negative to the patch test. It is advisable, therefore, to check up on these findings from time to time, and for this reason the results of an investigation seem worth recording.

INVESTIGATION OF 116 CASES

All the children admitted to the medical wards of a base hospital over a certain period were tested by the intradermal (Mantoux) and the percutaneous (patch) methods. The age varied from 6 months to 12 years. In the intradermal test 0.1 c.cm. of 1:1000 freshly prepared old tuberculin was injected into the skin of the forearm: this was sufficient to raise a wheal 8 mm. in diameter. The test was read 24 and 48 hours after injection, and was not considered positive if the

resulting wheal or flare was less than 10 mm. in diameter. In carrying out the percutaneous test a tuberculin patch was applied to the chest wall between the scapulae and lateral to the spine after cleansing the skin with ether and allowing it to dry. The patch was removed after 48 hours, and the reaction was read 24 and 48 hours after the removal. Papules or a red flare, or any intermediate stage, were regarded as a positive reaction. The patches used were those of Messrs. Evans Sons Lescher and Webb. The following were the results:

Total number tested	116
Number negative to both tests	74
" positive	34
" to intradermal and negative to patch test	8
" negative " " positive " " "	0

There was one case of plaster dermatitis. In two cases the patch tests were negative after 24 but positive after 48 hours. These were considered positive reactions. Of the Mantoux tests 10 were apparently positive after 24 hours, but had faded to negative after 48 hours. These were recorded as negative reactions.

SUMMARY AND CONCLUSIONS

The intradermal Mantoux test and the tuberculin patch test were performed on 116 children.

The Mantoux test was positive in 8 cases in which the patch test was negative.

Both tests should be read 48 hours after being applied, to avoid false positives thought to be due to the erythema around the needle puncture. It is important to use a preparation of old tuberculin not more than three weeks old.

It seems likely that different observers employing patches of different make may get variable results. The intradermal method is less liable to diversity and is more reliable.

I am grateful to Dr. Wyllie for his interest in this investigation, and for permission to publish the series; also to the nursing staff for their helpful co-operation.

MARY CRAGO, M.B., Ch.B.,

House-physician, Hospital for Sick Children,
Great Ormond Street.

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Convulsive Treatment of Climacteric Depression

Treatment of cases by electrically induced convulsions was begun in this hospital in March, 1942, and for the nine months ending Dec., 1942, we had the following results in female patients:

	Acute	Chronic	Total
No. of patients treated	43	17	60
Total No. of convulsions	945	349	1,294
No. of patients discharged	*30 (69.2%)	0	30

* Of this total 26 (60.6%) were discharged recovered and 4 (9.3%) were discharged relieved.

The average stay in hospital of all discharged cases was 5½ months—in recovered cases 5½ months, and in cases of involutional melancholia 4 months. The classification of these patients, the number treated, and the percentage rate of discharge in each class were:

Diagnosis	Number	Percentage Discharge
Involutional melancholia	25	68
Schizophrenia	19	31.5
Mania	3	100
Psychoneurosis	3	100
Other psychoses, including mixed types, puerperal confusion, and paraphrenia	10	30

The results in schizophrenia are poor. The 31.5% discharge rate noted in this group occurred in cases of very recent onset, and their clinical histories suggested the likelihood of remission with or without special treatment. The course of the illness noted under mania, psychoneurosis, and "other psychoses" seemed also to be unaffected by electrically induced convulsions.

As with other workers, our experience suggested that the best results are to be obtained in melancholia, especially of the involutional type. According to Jessner and Ryan (1942), "rather striking results have been reported in involutional

melancholia." This is not surprising, since the case records indicate that climacteric depressives have the most favourable prognosis of our female admissions. It seemed important, therefore, to consider whether treatment by electrically induced convulsions shortened the length of stay in hospital.

The length of illness before the use of this method of treatment was approximately six months. In the group noted above the patients were discharged recovered after an average stay of four months. It would thus seem a reasonable inference that treatment by electrically induced convulsions accelerates discharge of mental hospital patients who are admitted suffering from recoverable depression. Whether this recovery is associated with a greater or less degree of permanence it is too early yet to determine. So far, however, the reduction of time lost in illness from six months to four makes a strong case for the value of this form of treatment for this particular type of case. It has, too, the advantage of comparative safety. In 1,300 convulsions there were only two minor accidents: one a dislocation of the jaw, and the other a subluxation of the shoulder-joint.

I wish to thank Dr. George Somerville, medical superintendent, West Ham Mental Hospital, for permission to publish these results.

West Ham Mental Hospital. ELIZABETH P. DODDS, M.B., Ch.B.

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Treatment of Intestinal Carriers of the Enteric Group of Organisms

The following note on the results of the use of sodium iodophthalein in enteric infections may be of interest.

CASE HISTORY

A girl aged 16 was admitted to the local fever hospital on Sept. 24, 1941, after an illness of ten days. She complained of abdominal pain with constipation. The temperature was 98.8° and the pulse 90. Some ten to fifteen typical "rose spots" were present over the chest and abdomen, and there were one or two on the back. The following day blood and faecal specimens were sent for bacteriological examination. The Widal reaction was positive to *Bact. paratyphosum* B infection, while the faecal specimen showed the presence of the same organism. Progress and convalescence were uneventful. Her stools, however, examined at weekly intervals, persisted in giving growths of the organism for 22 weeks despite the use of such drugs as hexamine, salicylates, bismuth c salol, and vegetable carbon.

Reading of Saphir and Howell's (1940) successful treatment of a carrier of *Bact. paratyphosum* A with sodium iodophthalein (opacol), it was decided to try the effect of the drug on this carrier of *Bact. paratyphosum* B. The technique and dosage were identical with those used in x-ray examination of the gall-bladder. Two doses were administered, with an interval of a fortnight. The faeces remained positive after the first dose, but after the second dose three specimens taken at five-day intervals were returned negative.

The patient was discharged on March 13, 1942, after spending 24 weeks and 3 days in hospital—i.e., 26 weeks after the onset of the illness.

Since treating the above case I have had an opportunity of watching the effect of sodium iodophthalein in seven cases of *Bact. typhosum* infection. The essential points may be tabulated thus:

Case	Age (years)	Number of Weeks of Infection before Administration of Opacol	Number of Doses Required
1	38	10	2
2	11	14	1
3	13	15	1
4	17	10	2
5	8	10	3
6	23	7	2
7	54	5	2

All the patients were discharged after repeated negative stools.

COMMENT

The above is a method of treating medically intestinal carriers of the enteric group of organisms and should be tried before submitting the patient to any operative procedure.

Two doses of sodium iodophthalein are usually required.

The last two patients were members of the staff and were given the drug early in order that they might return to duty, thus saving man-power.

My thanks are due to Dr. S. K. Young, M.O.H., for permission to publish these cases.

R. CAILE, M.B., B.S.,
Deputy M.O.H., Durham City.

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Reviews

SHOCK

Shock. Its Dynamics, Occurrence and Management. By Virgil H. Moon, M.Sc., M.D. (Pp. 324; illustrated. 21s.) London: Henry Kimpton.

Why the first use of the word "shock" in medicine should be "credited" to this person or that is a mystery: many workers in this field to-day feel that it would be more fittingly debited. Seldom has so much confusion been due to so small a word, and monosyllabic at that: ignorance is usually cloaked in polysyllabic Latin derivations. The ancients from their fleeting glimpses of the unicorn described it with the legs of a buck, the body and head of a horse, and the tail of a lion; but we are still uncertain whether they described one animal or three. Dr. Virgil Moon admits the confusion between "shock" and the effects of haemorrhage, but considers shock to be an entity. In this new book (which supersedes his previous monograph, *Shock and Related Capillary Phenomena*, published in 1938) he believes still that this fabulous concept may be caught in the net of yet another definition. An essential property for catching the unicorn was a virgin, before whom it would lie down and allow itself to be apprehended. The ancients ascribed their notable want of success to the difficulty of finding a virgin. Our own failure with the shock problem, though perhaps partly due to the entertainment of preconceived ideas, can be more properly ascribed to too little of the right kind of experience. Virgil Moon, however, has no lack of experience in this field, and in the space of 324 pages, with the help of 437 references, he tries to tame the animal.

The author discusses at length the role of anoxia, toxæmia, local loss of fluid, nervous stimulation, anaesthesia, and adrenal dysfunction in the genesis of shock, and points out that confusion arises on four main points: lack of knowledge of capillary physiology, failure to pursue pathological inquiries, unrecognized sources of error, and a belief in the identity of shock with the effects of haemorrhage. We would point out a fifth: the application of results obtained by animal experiment directly to man. For instance, he states (p. 262) that "haemodilution occurs immediately after haemorrhages," having previously cited two references to animal experiments. If this were so in man, it might be useful in differentiating haemorrhage from some types of "shock," but recent work has shown that it may not occur for several hours. A great deal of stress is laid on capillary pathology—14 out of 19 photographs depict the lung. There is at the moment an unparalleled barrage of investigation directed on the "shock" section of the research front, and many of the views expressed herein will doubtless have to be modified as a result. This in no way, however, detracts from the value of this monograph, which sets out clearly the present point of view of an experimental pathologist, and poses numerous points for energetic argument and examination, together with many useful references.

OPHTHALMIC TREATMENT

The Ophthalmic Prescriber's Codex. By Francis E. Preston, D.O.M.S. (Pp. 176. 10s. 6d.) London: H. K. Lewis and Co. 1943.

In the *Ophthalmic Prescriber's Codex* Dr. F. E. Preston brings together an imposing mass of prescriptions, a guide to treatment, and much pharmacological knowledge. The section dealing with prescriptions covers about one-third of the book and is a full ophthalmic pharmacopoeia interspersed with concise and useful information on dispensing. It is conveniently arranged, and its value is enhanced by the fact that it gives both metric and imperial weights and measures. As this section is probably the fullest ophthalmic pharmacopoeia available, its usefulness can hardly be questioned. Nor can there be any cavil at the concluding 50 pages of the book, which give in readily accessible form such despised but essential things as lists of abbreviations in common use, normal values of various body fluids, posological tables, lists of incompatible drugs, weights and measures equivalents with conversion tables, and much other information besides. There are specially valuable sections on buffered ophthalmic solutions and on the sulphonamides.

It is the middle section, dealing with treatment, that is open to criticism. Those who like tabulated lists of therapeutic