was occasionally seen a nuclear pattern approaching that of the typical megaloblast. It is at least possible that in these animals and also in the cases discussed alimentary stasis in the loop led to an alteration in the bacterial flora of the intestine and disturbed the elaboration or utilization of essential vitamins. It is also possible that the liver extracts in experimental macrocytic anaemia, and yeast and liver extracts in the present case, had an effect analogous to that of folic acid and biotin, which have been shown to reverse many deficiencies produced in the experimental animal by sulphaguanidine or sulphasuxidine.

Summary

The case is described of a patient who developed steatorrhoea and persistent glossitis and stomatitis after ileocolostomy for probable regional ileitis. The oral manifestations of the case were controlled on separate occasions by calcium pantothenate given orally or intramuscularly, by inositol given orally, by yeast extract (marmite), and by oral or intramuscular administration of a highly refined liver extract (anahaemin).

Calcium pantothenate was effective against the glossitis but invariably aggravated abdominal symptoms, particularly when given intramuscularly. Anahaemin given parenterally produced abdominal pain in less degree. Given by mouth, anahaemin, marmite, and also inositol cured the sore tongue but did not provoke abdominal discomfort. Folic acid relieved the colic, but its action on the tongue could not be determined because glossitis was not present at this time. Neither fat absorption nor glucose absorption was improved by the administration of calcium pantothenate. Nicotinic acid, riboflavin, and aneurin had no effect on the glossitis or on the abdominal symptoms.

It is suggested that the action of the yeast and liver extracts was due not to their content of pantothenic acid but to the presence of some other factor or factors which restored existing deficiencies in a more balanced manner, leading to improvement in both oral and alimentary disturbances.

The possible mechanism of the development of the steatorrhoea and the associated avitaminoses is discussed, and it is suggested that alteration in alimentary flora and consequent reduction in the availability of essential factors may be at least partly responsible.

I am grateful to Professor L. J. Davis for his advice in the preparation of this paper; to British Drug Houses, Ltd., and the Marmite Food Extract Co., Ltd., for information regarding pantothenic acid content of anahaemin and marmite respectively; and also to Dr. F. Wrigley, Director of Medical Research, Roche Products, Ltd., for providing the calcium pantothenate and inositol used in this investigation.

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Since local health authorities are having difficulties in providing ambulance services, the Ministry of Health has asked hospital boards and management committees to review their arrangements for calling on ambulance services, to see whether fewer calls can be made. The greatest increase in calls has been for sitting cases taken by car to and from out-patient departments. The Ministry would like hospitals to hold clinics at times that fit in with the local bus services, and to arrange for out-patients living near together to attend for treatment at about the same time. The circular also points out that patients, even stretcher cases, can be comfortably conveyed long distances by rail instead of by ambulance or car.

THE PROGNOSIS OF CERTAIN HYSTERICAL SYMPTOMS

BY

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Thirty years ago MacCurdy (1918), discussing the treatment of hysteria, said that any physician with enough sympathy, interest, and common sense could obtain good results in many of these cases. He was referring only to the immediate outcome, and it is now agreed that even without the above requisites most doctors can get rid of a hysterical symptom. The present psychiatric view is that this is not always desirable, nor does it really help the patient, as he or she remains ill-equipped to stand up to the future strains that life is bound to impose.

This report is a simple account of what has happened to a number of patients who showed clear-cut hysterical symptoms, who were treated in a rather superficial way, and who have been followed up from four to six years after discharge from hospital.

Material

One hundred cases presenting various types of hysterical symptom were selected from 212 consecutive cases labelled as hysteria. All were seen either as in-patients or as out-patients in two large civilian general hospitals from 1939 to 1943. The selected cases were followed up from four to six years, to the beginning of 1947.

The selection was made by taking only those cases showing clear-cut, isolated, and easily recognizable symptoms, so that the symptomatological prognosis could not be mistaken. The cases not included showed a more diffuse and complicated symptomatology, often with objective and subjective disorders of sensation. Each of the selected cases showed one of the following symptoms: amnesia, aphonia, blindness, fits, paralysis, tremor, or vomiting, and the prognosis was very simply judged on the presence or absence or replacement of this symptom after a given time and on the rapidity and frequency of relapse, if any, during this time.

The follow-up was successful in 90 of these cases, the remaining 10 being untraced. The actual material for study is therefore 100 cases with immediate results and 90 with a follow-up.

Definition.—Hysteria is here used to describe a form of psychoneurosis in which an emotional problem has been wholly or partly avoided by the development of a physical symptom which in itself may be symbolic of the presumably unconscious motivation, thus differing from other

Table Showing Analysis of Cases and Results of Follow-up

Symptom	No. of Cases	Condition on Discharge		Follow-up Results, 1946 (4 to 6 Years after Discharge)				
		Rec'd	Not Impvd.	Well	Impvd.	Unchanged (at Work)	Worse	Not T'cd.
Amnesia ..	23	23	0	17	1	0	2	3
Aphonia ..	29	29	0	19	8	1	0	1
Blindness ..	3	3	0	3	0	0	0	0
Fits ..	6	2	4	2	0	1	1	2
Paralysis ..	23	18	5	18	0	2	2	1
Tremor ..	10	10	0	4	0	4	0	2
Vomiting ..	6	5	1	3	0	0	2	1
Total ..	100	90	10	66	9	8	7	10

psychoneuroses in which the symptoms are coloured by a fixed or diffuse anxiety or tension, and from malingering, in which the motivation is conscious.

Analysis of Cases.—The accompanying Table gives a simple analysis of the cases according to the symptoms.

The patients were from 16 to 40 years old ; 60 were females and 30 were Service cases. Precipitating factors were present in every case ; some were more dramatic than others and a few were fairly difficult to elicit. Loss of memory often coincided with the end of a leave period ; loss of voice and loss of power with direct evidence of enemy action ; tremor with the sudden realization of fear ; and blindness with the sight of something unpleasant or of someone thought dead. Since only the prognosis of symptoms is being considered, no other analysis, such as of previous personality, of family, or of physique, has been attempted.

Treatment

It is generally agreed that if a hysterical symptom is to be removed it can best be done by suggestion, and the following methods were used :

(a) *Direct Suggestion*.—This involved the simple statement that a symptom will disappear and normal function return, followed by an examination and by a command to employ the previous non-functioning part. Alone this was of value only in cases of mild disability, such as aphonia, but was of considerable help as part of other methods of suggestion.

(b) *Indirect Suggestion*.—This implied the ignoring of symptoms such as fits or vomiting either completely or by pointing out that they were unimportant. One part of this method, not sufficiently realized by many, was to refrain from inquiry about the progress of a hysterical symptom.

(c) *Hypnosis*.—There is no need to describe the technique of this form of suggestion, which, although very effective at first, tends to be used less and less by the physician who continues to interest himself seriously in psychoneurosis. It has often been said that the theatrical atmosphere and the unfortunate history of hypnosis have a tendency to produce an unusual state of mind in the doctor practising it.

(d) *Suggestion under Thiopentone*.—This method was used in all severe cases of hysteria and will probably replace hypnosis as the method of choice in suggestion therapy, particularly in general hospitals. The technique of this therapy, although well known to psychiatrists who practise narco-analysis, may be of interest to those physicians who like to do their own psychiatric work so far as is possible.

The patient was usually seen the day before treatment, spoken to about his illness, and thoroughly examined. He was told that his condition was a genuine illness caused by some shock to his nervous system, and that this had caused his brain to lose its normal control over the part of the body affected. He was told that he would regain normal control of all his functions and be well again, that his case was in no way unusual, and that recovery would occur the next day with treatment.

The next day he was, if possible, removed to a single room. The thiopentone was prepared (0.5 g. in 10 ml.) ; 2 ml. was injected and the patient was told he was feeling drowsy and more relaxed. When he began to yawn or to snore slightly he was told that his ability to move or see or feel was returning, and that he was recovering rapidly. He was then given orders to move the limb and was shown the limb moving, and when normal function was established he was aroused and asked to say how it all happened. Not infrequently there was a rush of emotionally charged memory, with tears, shouts, and vivid descriptions.

The above forms of suggestion treatment were all followed by an important routine. No one was allowed to ask the patient how the affected part was, and full recovery was accepted as a *fait accompli*. Then the patient was given two or three interviews and his or her story was listened to sympathetically, with interest and without haste ; and, indeed, more good seemed to come from listening than from talking, as patients often found a more satisfactory solution to their problems without further prompting. Environments often needed changing, but more frequently the patient's assessment of his environment was biased by his own feelings of self-importance, and a change in his approach to such problems was essential. The most difficult emotions

to deal with were resentment and self-pity, and encouragement and stimulation of morale were needed to make many of these people realize that what a man believes of himself is more important than what others think of him.

Analysis of Results

The results have been analysed in the same way as the cases, under the headings of each symptom (see Table).

Amnesia

All the 23 patients showing hysterical amnesia recovered their memory within seven days, 18 of them on the second day with the help of direct suggestion or mild hypnosis. The remaining six were reassured, and were allowed to move freely about the ward and recover gradually without any active intervention. Two cases remained amnesic after six days and were given suggestion under thiopentone with success.

The impression given to the physician was that many of these people had committed some social crime ; 12 of the patients were young soldiers absent without leave and were avoiding the consequences of their action. The value of this particular symptom as a protection is obvious enough, and if the patient can be assured of his sanity and the return of his memory it is perhaps better to leave him alone until he feels consciously or unconsciously that he can face his environment. All these patients were men between the ages of 18 and 30 with no previous history of hysterical symptoms—an interesting and well-recognized sex incidence.

Follow-up.—Twenty of these patients were seen again from four to six years later, three being untraced. Of the 10 Service patients, five had been discharged from the Army as psychoneurotic and had received no punishment for their crimes ; they had had no active psychotherapy except a sympathetic attitude and a course of training for civilian work. All were well and at work, although their attitude towards life remained mildly resentful. The other five Service patients had been retained in the Army, had fought in France and Germany (two with distinction), and eventually had been discharged well. They were all cheerful and at work, and were rather embarrassed at being reminded of their loss of memory. Of the 10 civilian cases, six had not relapsed, two had relapsed once, one more than once, and one was in a mental hospital suffering from schizophrenia. Of the two difficult cases that took a week to recover, one was the schizophrenic and the other had relapsed with amnesia and had developed a tremor as well.

Aphonia

These 29 patients, 20 of whom were women, all recovered their voices with direct suggestion and without very much difficulty. There was in every case a strong tendency to immediate relapse, but reinforcement of the suggestion dealt with this. A very simple technique was used. The patient was asked if she would like her voice back and was then requested to cough. She was informed that if she could cough she could speak, and the throat was examined firmly, often with the production of gagging and an inarticulate sound. This was gradually transformed into articulate speech by telling her to repeat simple words. Very little else was done for these patients, since the symptom was a minor one and not associated in this series with deep psychological disturbances. They all seemed reasonably well adapted to environment, and many were of the emotionally labile and sensitive type with a tendency to tremor and "nervousness." In 15 of the 20 women the aphonia had followed a catarrhal laryngitis.

Follow-up.—Nineteen of these cases had remained well, although they still confessed to nervousness and sweating and an unreasonable fear of difficult situations. Two had relapsed, with loss of voice persisting up to six weeks following sore throat and laryngitis. Seven cases were difficult to assess ; these patients said that they always lost their voice if they became embarrassed, worried, or unhappy. They did not seem to be inconvenienced by this, and always regained it when the trouble had departed. The final impression obtained was that aphonia by itself is a symptom of only mild mental dissociation and has a good prognosis. One case was untraced.

Blindness

Only three cases of blindness were seen, and all in 1941. One was a battle casualty who had seen his best friend decapitated, one a woman who had seen her child burnt to death, and the third a woman whose husband, believed dead, had returned at a rather embarrassing moment. All were treated by hypnosis, recovered, and are now well and happy. A simple explanation was given to each one, but no other psychotherapy except an attempt at softening the blow and uncovering a feeling of guilt in the two women.

Fits

The six cases showing hysterical fits were more difficult to deal with. They were treated by indirect suggestion, no importance being attached to the attacks. When these recurred in the ward the patient was moved gently out of the way and allowed to lie on the floor. With this treatment the attacks became less frequent and less severe in every case, but only two lost the tendency completely. The remaining four replaced the true fits by "black-outs," attacks of vertigo, and "fainting attacks." These four cases seemed to have considerable instability, and were referred to a psychotherapist.

Follow-up.—The two who had improved most in hospital remained well; one committed suicide three years later after in-patient treatment in a mental hospital as a schizophrenic; one had remained partially well and was at work, but complained persistently of black-outs. Two were untraced.

Paralysis

Twenty-three cases of hysterical paralysis were treated by hypnosis before 1942 or thiopentone suggestion after 1942. The cases themselves were interesting because in every one the legs were affected, and in three the arms as well. In 10 cases all limbs were freely movable in bed by the patients' own efforts, but walking was impossible or very difficult.

Immediate treatment produced dramatic recovery in 15 cases. The remaining eight were treated again next day and the required result obtained in three of them. Five cases failed to respond, and every one of these had on admission the power to move the legs in bed combined with inability to walk or stand. These were referred to a psychotherapist. In all the recoveries an eventual sorting out of some of the mental conflicts was obtained without much trouble. The patient was told his memory for walking had now returned and had formerly been lost because of some worry, trouble, anxiety, or some situation of either real or imagined difficulty. The enormous confidence obtained from the removal of the symptoms seemed to help the patient to overcome any diffidence in his relations with the physician and to unburden himself of his deepest troubles. It was less easy to find a reasonable solution of his difficulties, although often it was sufficient to make a few suggestions and tell the patient he must choose the eventual path himself.

Follow-up.—Fourteen cases remained well without further trouble; three became well and had relapsed twice in three years but were now well. One case recovered after two injections of thiopentone, but is now paralysed again and refuses to see a doctor professionally, although she allows herself to be wheeled up by her elder sister for follow-up purposes. Of the five failures after thiopentone, one responded to a deep psychotherapeutic regime, one became an obsessional psychotic, two remained apparently unchanged, and one was untraced, so that 18 eventually made a good recovery.

Tremor

The 10 cases of hysterical tremor were very deceptive. They all recovered with suggestion under thiopentone; four relapsed in two or three days, but recovered again on repetition of the dose. All these patients were loud in their praise of the wonderful treatment, and discussed their difficulties almost with relish.

Follow-up.—Eight out of 10 were traced. Four of these relapsed within a year, and are still trembling away without much incapacity. None is willing to see a psychiatrist. The other four are well and earning their living. This is a very poor and rather humiliating follow-up after an apparently very successful beginning, and supports the psychiatric axiom, "Beware of praise from a hysteric."

Vomiting

Six cases of hysterical vomiting, three of them in nurses, were encountered. The treatment of these was indirect suggestion—ignoring the seriousness of the symptom, giving no special diet except a full normal one, and assuring the patient that starvation would not occur. Questions about the patient's progress or the occurrence of vomiting were avoided, and a general "playing down" of the whole affair seemed to start the improvement. Five of these cases had lost their vomiting in a month and appeared well on discharge. The sixth patient continued to have the symptom intermittently and discharged herself from hospital.

Follow-up.—Three cases remained quite well, one developed an obsessional neurosis and remained a burden to her family in spite of analytical psychotherapy, and one was untraced. The sixth case was run to earth in a children's day nursery; she had apparently been to no fewer than seven hospitals with nearly every hysterical symptom imaginable. Her most recent experience had been a hysterical retention of urine treated by suprapubic cystostomy, of which she was very proud.

Discussion

The prognosis of neurosis is said to depend on the age, personality, and intelligence of the patient and on the duration, nature, and severity of the disorder. Certain of these factors are constant in this report: the age group was that of the young adult; the intelligence of each patient seemed not greatly above or below the average; and the nature and duration of the disorder were those of acute recent hysteria. The variants are the personality of the patient and the severity of the disorder. This report is lacking in any adequate personality investigation, as if this is to be of value it must be done by a psychiatrist; the severity of the disorder is the only explored and known variant.

In a general study of recent hysterical states Kennedy (1940) says that it is impossible to form an opinion about the future on the basis of symptomatology alone. Fortunately he also says: "Though often misleading until all the causative factors are known, the nature of the actual symptoms, apart from their general type, is of great prognostic value."

This tendency, in an estimation of the prognosis of hysteria, to discount the symptom and pay much greater attention to the previous personality and behaviour of the patient is supported by current psychiatric opinion, which rightly holds that the removal of the symptom cannot possibly affect the underlying personality that produced it. In fact, many psychiatrists condemn the formal removal of the disability, claiming that good psychotherapy will allow the patient to cast off his symptom without any direct reference to it.

The wider view of prognosis in conversion hysteria has been studied in military psychiatry both here and in America. Miller (1940) states that of all the severe neuroses conversion hysteria showed the highest percentage of men returning to duty rapidly, but assessment of relapse was impossible owing to difficulties of follow-up. A comprehensive survey of readjustment to civilian life was made in America in 1919 and 1924 on 830 cases of "war neurosis" (Medical Department of the U.S. Army, 1929), and in the 1919 survey the majority of hysterics were having difficulty in readjustment and little more than half were able to earn their own living. In 1924 this group showed a higher proportion of readaptation, 75% being at work.

A comprehensive survey of prognosis was made by Ross (1936), who analysed the results of the Cassel Hospital patients admitted from 1921 to 1933. Taking all the psychoneuroses, he finds that after one year 45% are well, after three years 40%, and after five years 34%. Unfortunately 60% were untraced in this sixth year follow-up, so that his recovery figures may be too low. Analysing cases of

hysteria alone, he found that at the end of four years out of 89 cases 43 were well, 23 improved, and 23 unchanged. No analysis according to symptomatology was made.

Luff and Garrod (1935) analysed the results in 500 cases of psychoneurosis treated at the Tavistock Clinic between 1928 and 1931. There were 75 cases of hysteria, and on discharge 13 were "much improved," 25 "improved," 17 "slightly improved," and 20 "not improved." After three years the figures read in the same order 17, 21, 6, and 16, the remaining 15 having relapsed. The "much improved" and "improved" groups are taken together to give a "relieved" figure of 50.6%, which after three years is the same as on discharge; these people were at work, and the "much improved" group would here be labelled "well."

This present report shows a higher symptomatic recovery rate than that obtained by other authorities, as 83% of patients were still at work for four to six years after discharge. This result has occurred in spite of inadequate psychotherapy, and the factors determining this outcome must be considered.

The selection of patients with a florid, clear-cut symptomatology and the comparative absence of cases of chronic hysteria in this series have probably improved the prognosis as a whole. Patients may also have come somewhat earlier and been more co-operative initially at a general as opposed to a psychiatric hospital, and the importance of an unusual precipitating factor such as aerial bombardment may not have been sufficiently stressed. These four considerations taken together form quite a weighty bias towards natural recovery. Moreover, although it is not always possible to know what standards are used by others in judging recovery or improvement in psychoneurotic patients the recovery or otherwise from a disabling symptom is easy to judge. Perhaps not even one out of the 66% who are here labelled well four to six years after treatment might be thought recovered at all in the psychiatric sense, although he or she is back at work, symptom-free and feeling well. Therefore this investigation of the prognosis of certain hysterical symptoms is not comparable with the results of others who have given statistics regarding the prognosis of psychoneurosis in general or in particular.

Relation of Particular Symptoms to Their Prognosis

Owing to the small number of cases and the numerical variation of each particular symptom only a suggestion of certain trends in prognosis is justified, and no one symptom can be labelled malignant or benign. Aphonia and amnesia seem to have an excellent immediate outcome—probably whatever treatment they receive within reason—and the result seems to be maintained in the follow-up. Paralysis showed a slightly less favourable result, but 18 out of 23 were well five years after leaving hospital, although these were not quite the same 18 that recovered immediately, as one of these relapsed and one of the early failures recovered after expert psychotherapeutic treatment elsewhere.

Tremor was the one symptom that supported the psychiatric theory that removal of a hysterical symptom is quite unrelated to improvement of the psychoneurotic illness itself. The immediate recovery of all 10 cases and the follow-up finding of only four well out of 10 speaks for itself.

Fits appear to be a more difficult immediate problem, as only two out of six recovered in hospital; these remained well.

Vomiting was more hopeful at first, five out of six stopping this symptom in hospital; only three of these were well five years later.

Blindness was found in only three cases, and these seem to have made an excellent recovery.

Conclusion

There is very little to add on recapitulation. The word "recovery" will never mean the same to a psychiatrist as to a physician, and one can only try to correlate physical and psychological terms. It would seem that an acute hysterical episode has not the rather grave prognosis that it is usually stated to have, and that it does not always need skilled psychotherapy or psycho-analysis to produce an apparent recovery. It is tempting to think of the hysterical personality in degrees of instability with differing thresholds of resistance, some people needing a more powerful stimulus than others to produce the reaction—rather like cerebral dysrhythmia and epilepsy in which the concept of differing grades of liability to produce clinical epilepsy is accepted. Perhaps the most stable of us would under sufficient stimulus produce a hysterical symptom in the same way that we would produce an epileptic fit if sufficient strength of electric current were passed through our brain. If so, there is at least the suggestion that in some cases of hysteria it is unnecessary to do more than relieve the symptom and discuss the patient's problem with sympathy, interest, and common sense.

Summary

One hundred cases of acute hysteria are analysed symptomatically, and the results of treatment by suggestion are recorded.

A follow-up four to six years later was successful in 90 of these cases, and the results of this are tabulated and discussed.

The suggestion is made that the outcome of such cases is better than is generally believed even although long, skilled, formal psychotherapy is not available.

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NUTRITIONAL MACROCYTIC ANAEMIA IN TEMPERATE ZONES

BY

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The nutritional anaemias may be divided into primary types, in which the dietary deficiency has been the main cause of the anaemia, and the secondary types, in which utilization by the body of a complete diet is defective, usually because of some organic disorder. Occasionally the anaemia may be due to combined causes.

Macrocytic anaemia resulting from nutritional deficiency is commonest in India, Malaya, and China; it also occurs frequently in Macedonia, where it presents some different features from the "tropical" variety. A nutritional macrocytic anaemia may, however, occur in temperate zones. Such a case occurring in England is here recorded.

Similar cases have been described in England, U.S.A., Canada, Holland, and Denmark (O'Hara and Grewal, 1927; Aykroyd, 1930; Kern, 1931; Ungley, 1933, 1938; Groen and Snapper, 1937; Alsted, 1939; Townsend and Begor, 1942; Watson and Castle, 1946). Most of the authors remark on the deficiency of protein in their patients' dietary. Evidence of the relation of animal protein to tropical nutritional macrocytic anaemia was provided by