2. If this does not bring about cessation of convulsive movements within a few minutes, intravenous sodium pentothal in 2.5% or 5% solution (or hexobarbitone or sodium amytal) should be administered in addition to the inhalation therapy described above, and in a dosage adequate to control the convulsion.

3. As soon as the convulsion is brought under control an intravenous infusion of glucose-saline (10% glucose in normal saline) should be started for the purpose of promoting renal function and restoring the normal kidney mechanism of H-ion adjustment (that is, the elimination of excessive basic phosphates and bicarbonates *via* the urine). One litre of glucose-saline might well be given to an adult and 500 to 750 c.cm. to a child. Once the convulsion is under control the anaesthetic and operation may be continued, with the early termination of the latter always in mind.

4. If facilities are available the patient's blood pH and/or the pH of the urine should be checked within an hour after the convulsion ceases, and CO₂ and O₂ inhalations should be given to the point of hyperpnoea or for 5 minutes every half-hour until such time as the blood pH is below 7.5 or an acid urine is being secreted. The reaction of the urine is not as accurate an indication of alkalaemia as the blood pH.

5. Before the patient is returned to bed 2 to 3 dr. of ammonium chloride in six times that volume of water should be instilled by gastric tube into the stomach.

6. As soon as the patient is able to swallow he should be given cool drinks freely, but in small quantities at one time. The basis of the drinks should be physiological saline. Prior to this, rectal saline is indicated.

7. The patient must be kept cool—if possible, in an air-conditioned room; or, failing that, an electric fan may be played on face and torso.

8. If his temperature remains higher than 102° F. and the atmosphere is warm and possibly humid, a wet sheet may be placed on the patient's thorax and abdomen and a stream of air directed thereon from an electric fan.

9. If his temperature is persistently higher than 102° F. and respiration continues to be rapid, cold 5% glucose-saline enemata may be administered in addition to the measures mentioned above.

10. Inhalations of 5% CO₂ and 95% O₂ must be instituted on the first sign of any facial or other twitching.

Summary and Conclusions

Convulsions occurring during the administration of general or local anaesthetic drugs are primarily due to interference with or inhibition of cerebral cell respiration.

The interference or inhibition is usually caused by (i) frank anoxaemia; (ii) occult tissue anoxia due to alkalaemia and acapnia; or, as when local anaesthetic drugs are used, by (iii) the toxic action of the drugs inhibiting the oxidation-reduction enzymes of the tissues.

The principal treatment is prophylactic.

Emergency treatment is outlined.

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According to *Presse Médicale* the number of cases of venereal disease in France in 1942 increased by 55% over the figure for 1941. In the Beürmann dispensary 369 fresh cases of syphilis were seen, as against 214 in 1941. In the Department of the Loire the numbers of fresh cases of syphilis for the years 1938 to 1942 rose as follows: 47, 60, 93, 126, and 193.

HYSTERICAL SEQUELAE OF INJURIES

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There is a general appreciation of the influence of hysterical mechanisms in prolonging and intensifying all kinds of illness, mental and physical, in Service patients. Where symptoms persist, although there is no longer any evidence of organic disease, the possibility of hysterical prolongation is seldom overlooked. On the other hand, where abnormal physical signs persist despite thorough and rational treatment (especially if these signs are definite and striking) psychogenic factors are apt to be neglected. This neglect, with the resulting delay in diagnosis, may be due, in part, to the relative rarity of conversion symptoms in this war compared with the last.

Many factors have probably contributed to the decline in the incidence of hysteria as a primary diagnosis and of conversion symptoms in particular. Of these, the reorientation of psychiatric opinion that has taken place in the intervening years is perhaps one of the most important. It can scarcely be doubted that the form of many hysterical manifestations was largely the product of medical expectation and of medical examinations carried out with preconceived ideas. The search for definite hysterical symptoms and specific hysterical "stigmata" has given place to psychobiological methods with their emphasis upon the assessment of the total personality. For example, as has been pointed out by Stephenson and Cameron (1943), the general recognition of the anxiety state, the early diagnosis of this condition, and its acceptance as an illness requiring and amenable to treatment have tended to make the development of gross physical symptoms, as it were, unnecessary.

Case Material

The present paper is concerned with a series of six cases, all of which were admitted to this hospital during one quarter in 1943, in which a striking and distinctive hysterical disability followed injury to the hand or arm. The clinical picture—a cold, blue, weak hand with impaired superficial sensibility—was rarely enough encountered in an annual turnover of some 1,400 neuropsychiatric admissions to make the series a memorable one. There can have been no possibility of contagion, since all the cases developed in widely separated units or establishments. The following clinical features were shown by the series as a whole:

In all six cases the hand was cold, subjectively and objectively, and cyanosed; power was markedly impaired; the skin was soft and shiny. In five of the cases superficial sensibility was impaired or abolished up to a line round the long axis of the limb (in the sixth case the area of diminished sensibility corresponded with the distribution of the ulnar nerve). In four of the cases frank swelling of the hand was present. Disturbances of sweat secretion were spontaneously reported: "It does not seem to sweat properly"; "It sweats more and feels either very hot or very cold"; "It sweats more"; "Seems dry." The finger-nails were abnormal—in two cases they were thickened, and in two others badly bitten. Repeated injury to the limb had occurred; plaster-of-Paris immobilization had been employed (three of these cases had fractures). In three of the cases there was immobility of interphalangeal or metacarpo-phalangeal joints due to muscular spasm; and spontaneous pain, described as burning or cramp-like, variable in site and intensity.

It is noteworthy that in five of the cases manual dexterity of a rather high order was an essential requirement for carrying out the rating's special duties.

Case 1 (Wireman, aged 22).—In July, 1942, this rating fell and dislocated his right elbow. Reduction of the dislocation was followed by limitation of movement at the elbow for some months. In Jan., 1943, after a second fall on to the same elbow, movements again became limited and painful. Detachment of the common extensor origin was demonstrated radiologically, and this was successfully

replaced at operation on Feb. 2. He was then treated with plaster-of-Paris immobilization and an arm-sling for five weeks. At the end of this period there was almost complete loss of voluntary movement in the elbow, wrist, and hand, and he could not abduct the arm at the shoulder. In addition the hand was cold, blue, and slightly swollen. Sensibility to cotton-wool and pin-prick was absent up to a line around the middle of the forearm. This condition persisted until the middle of March, at which time all the muscles gave normal electrical reactions; but he would not use the arm or hand even to feed himself, and the diagnosis of hysterical prolongation of a healed injury to the elbow was made. Full voluntary movements were regained in one session of explanation and persuasion; exercises and P.T. were given for three weeks, when he was discharged to duty with no residual disability.

Case 2 (Able Seaman, aged 25).—This rating broke his leg in 1934 and recovered without any residual disability. In 1939 he injured his left hand, which became swollen. He was told that he "had a ganglion" and was given four months' light duty, thus missing his ship. The hand returned to normal during this period. In Aug., 1942, a 4-in. shell fell on to the back of his left hand. Pain and swelling followed, but there was no bone injury. The hand was immobilized in plaster for five weeks, after which, in spite of intensive physiotherapy, it became cold, blue, and swollen up to a line two inches above the wrist. The radial artery pulsated normally, but capillary return in the hand was sluggish. The hand felt stiff, and movements were weak and slow. Superficial sensibility was impaired in a patchy fashion, approximately over the glove area; the upper limit of the impairment coincided with that of the cyanosis and swelling. The nails were thickened and the hand was dry and cold to the touch. He said that when the hand warmed up it did not seem to sweat properly. He also complained of burning pain, mainly in the third finger. Eight months after the injury a diagnosis of hysteria was made, and a month later, following explanation, persuasion, exercises, and physiotherapy, he was discharged to duty with a normal hand.

Case 3 (Leading Wireman, aged 24).—In March, 1941, this man sustained a left Colles fracture with fracture of the scaphoid. Good union was secured after five months' immobilization in plaster-of-Paris. Pain and numbness persisted in the wrist, but he was able to carry out full duties. In June, 1942, a second accident caused the scaphoid to be fractured again; once more good union was obtained by immobilization in plaster. Convalescence was prolonged owing to persistent pain and numbness of the wrist and hand, which became cold, blue, shiny, and swollen, with thickening of the nails and loss of sensibility to cotton-wool and pin-prick of glove distribution. All movements of the hand were equally weak, but there was no muscular wasting. A diagnosis of hysteria was made nine months after the second injury; five weeks later he was discharged to duty with a normally functioning hand and symptom-free.

Case 4 (Air-fitter, aged 22).—This right-handed rating had a congenital deformity of his right hand (fusion of the fourth and fifth metacarpals and of the lunate and hamate bones). He had been self-conscious about the deformity since boyhood, but it had caused no disability until, at the age of 17, he began to experience difficulty in performing fine movements with the hand and started to use his left hand for writing. He joined the Navy in Jan., 1940, and stood up to a long period of arduous and dangerous service in aircraft carriers, managing to perform his duties without too much difficulty, although still using his left hand more than his right. In Aug., 1942, during severe enemy action, his right hand was caught between a shell and a bulkhead. The injury was slight, causing a small bruise, but from this time he became unable to hold anything in his right hand, which subjectively felt cold and was held in the "claw" position. On this account he was drafted ashore, where the symptoms improved a little until he was required to work on and accept responsibility for the servicing of a type of aircraft which was new to him. He said: "I can't work on fighter aircraft, because my hand goes stiff; I might make a slip-up and get into serious trouble." On admission to this hospital in May, 1943, his right hand was cold, blue, and showed typical glove anaesthesia; the fingers were held in the "claw" position with the thumb adducted. The grip was weak and there was a spasm of the antagonists. A diagnosis of hysteria was made, and after one week's treatment he was writing well with his right hand (for the first time for five years) and had good insight. He was discharged to duty.

Case 5 (Petty Officer Motor Mechanic, aged 25).—Two days after he joined the Navy in Aug., 1940, an accident occurred in which he fractured his left elbow, which was immobilized in plaster for eight weeks. Uninterrupted recovery ensued. In June, 1941, soon after joining a motor attack craft, he had to be drafted ashore because, when working below decks at sea, he became anxious and complained of dizziness, weakness, nausea, and excessive sweating. In Oct., 1942, his right arm was crushed between two boats, the shaft of the ulna being fractured. The arm was immobilized in plaster for about four months. On removal of the plaster the arm was weak and movement at the elbow limited. Attempts to move the arm were

painful. Three months later he still complained of pain in the forearm and of stiffness of the elbow, which was then fixed in full flexion by muscle spasm. Hand movements were very weak and painful. The hand was cyanosed and the skin soft and moist. There was impairment of superficial sensibility of glove distribution. The nails were badly bitten. The right hand sweated more than the left and felt subjectively either very hot or very cold. A diagnosis of hysteria was made seven months after the injury; fourteen days later, during which he received psychotherapy, full function was restored and the signs and symptoms had disappeared. He was then discharged to duty.

Case 6 (Sick-berth Attendant, aged 33).—In Aug., 1942, he received shrapnel wounds while serving in a landing craft engaged in the Dieppe raid. One tiny fragment pierced the dorsal aspect of his right hand, where it remains, causing no symptoms. A second small fragment passed superficially to the right ulnar nerve from left to right, lodging in front of the internal epicondyle of the humerus. Healing of the wounds was rapid and complete, but the right hand and wrist became "completely paralysed," and the ulnar side of the hand and wrist was tender on pressure and spontaneously painful. A month later he complained of burning pain, numbness, and tingling of the ulnar side of the hand. He could not extend the fourth and fifth fingers, and passive extension caused pain. The fingers could not be adducted to the third finger. The ulnar nerve was felt to be thickened at the elbow. All movements of the hand were weak, but there was no appreciable wasting. Flexor carpi ulnaris, palmaris brevis, adductor pollicis, interossei, and lumbricals responded normally to faradic and galvanic stimulation, but the fifth tendon of flexor digitorum profundus did not respond to faradism. Sensibility to cotton-wool and pin-prick was diminished in the distribution of the ulnar nerve. The hypothenar eminence was tender on pressure. The whole hand was swollen up to the level of the proximal wrist crease. It was cold and cyanosed and the skin was shiny. Sometimes the hand was found to be sweating more than the left. The finger-nails were bitten. A diagnosis of concussion of the ulnar nerve was made and physiotherapy was given, but without improvement. By Feb., 1943, the condition was worse, and the fourth and fifth fingers were so flexed upon the palm as to resemble a Dupuytren's contracture. At this time his attitude towards his symptoms was very complacent; he displayed an amused and faintly contemptuous tolerance of the attempts that were made to treat his hand. His knowledge of the presence of an organic lesion and of its nature made psychotherapy the more difficult; but one month after psychotherapy was started he had become co-operative, showed fair insight, and had a hand normal in function and appearance, with full extension of the fingers. Some tenderness on pressure over the hypothenar eminence remained. He was then discharged to duty.

Diagnosis

This will be considered under three headings:

1. Physical Signs and Symptoms

The principal features have been enumerated above. In all the cases recovery from the original injury had proceeded beyond the point when the residual disability could be directly attributed to it. The uniformity of the physical signs was remarkable, and the clinical picture, when seen, was distinctive enough to bring hysteria to mind at once in the consideration of the differential diagnosis of any similar condition. The striking vasomotor disturbances led, before the diagnosis had been established, to a proposal to perform sympathectomy in Cases 2, 3, and 6. Tests were done in order to assess the probable efficacy of this measure. In Cases 2 and 6 an injection of novocain was made into the stellate ganglion, with immediate temporary relief of symptoms together with the production of a Horner's syndrome.

Physical findings which suggested a "functional" origin were: normal electrical reactions of the muscles; the typical "glove" distribution of the anaesthesia; spasm of the antagonist muscles; absence of appreciable wasting; and the exclusion of arterial disease, arthritis, and the major endocrine and neurological disorders, such as syringomyelia and tabes, in which trophic changes in the hands are known to occur.

There remained for consideration the so-called vasomotor neuroses, or "angioneuroses." To these conditions our cases presented certain similarities. Of the more familiar of them, however, Raynaud's phenomena are characteristically paroxysmal, bilateral, and induced by cold; while erythromelalgia—first described by Weir Mitchell in a sailor—has a disputed pathology in which it is perhaps possible that psychogenesis sometimes plays a part. It is said to occur more commonly in the feet than in the hands, and pain is a more pronounced

feature than it was in our cases. The onset following trauma, the marked sensory and motor loss, and the readily demonstrated hysterical motivation (see below) served further to distinguish our group. There is a possibility that hysteria is too seldom considered in the differential diagnosis of vasomotor disturbances. In a recent discussion at the Royal Society of Medicine on "Immersion Injuries and Vasomotor Disorders of the Limbs in Wartime" (*Proc. roy. Soc. Med.*, 1943) no mention was made of psychogenic disorders such as those described here.

2. Response to Treatment

In all the cases improvement had ceased with physical methods of treatment employed alone.

Case 1.—Relatively little time elapsed between the removal of the plaster and the diagnosis of hysterical paralysis. Psychotherapy of a very simple kind, combined with active exercises, resulted in complete recovery in three weeks.

Case 2.—The hand was immobilized for five weeks (there was no fracture); symptoms persisted, but the diagnosis of hysteria was not made until seven months later. Psychotherapy was then begun, and recovery followed in one month.

Case 3.—The diagnosis of hysteria was made nine months after the injury. Recovery followed after five weeks of psychotherapy.

Case 4.—Here the injury was slight and immobilization was not required. The symptoms were severe. The diagnosis was made nine months afterwards, but psychological treatment for one week enabled the patient to write with his deformed hand for the first time for five years, and he was discharged to duty in 2½ weeks.

Case 5.—The diagnosis was made seven months after the injury. Complete recovery was obtained after a fortnight's psychotherapy.

Case 6.—The diagnosis was made six months after the injury. Complete recovery, apart from a very slight organic residuum, was obtained after one month's psychotherapy.

The basis of treatment was to obtain the patient's confidence and co-operation. The formal psychotherapeutic procedures comprised explanation, persuasion, and suggestion. Re-education and physiotherapy were given at the same time, with certain precautions; the physiotherapist was instructed to "make the patient do all the work," not to discuss the symptoms, and not to use any form of passive treatment, particularly faradic baths, which had been found always to make the symptoms worse. Occupational therapy was arranged to suit the interests of the individual—e.g., in Case 2 boxing was prescribed.

Most of these patients made rapid progress up to a certain point and then "hung fire." At this point they had to be driven hard, and sometimes were subjected to a restriction of their privileges. In all cases these measures were successful, although in Case 6 a threat of transfer to a disciplinary rehabilitation centre was required. In this case, also, continuous traction by means of elastic and plaster-of-Paris was needed to reduce the secondary contracture. Later the normal hand was immobilized for a short time in order to encourage the patient to use the affected one. It was found useful to obtain, for a three-cornered discussion, the voluntary co-operation of one of the group who was improving satisfactorily with one who was lagging behind.

3. Motivation

The Committee on Head Injuries of the Medical Research Council (1941) has defined hysteria as "a condition in which mental and physical symptoms, not of organic origin, are produced and maintained by motives never fully conscious, directed at some real or fancied gain to be derived from these symptoms." While the mere absence of a physical basis for complaints is insufficient, and the demonstration of an adequate personal motive is one of the most important of the positive criteria for a diagnosis of hysteria, it need hardly be pointed out that many a severely wounded or physically ill man has as good reason as the suspected neurotic to wish to avoid returning to the dangers and discomforts of active warfare. The discovery of a motive, such as the wish to be invalided from the Service, is by no means pathognomonic of hysteria; the demonstration of previous neurotic traits, of excessive dependency and emotional immaturity, of underlying anxiety, of a "neurotic" attitude towards symptoms or treatment, and of other neurotic features in the personality may provide helpful confirmatory evidence. In none of the cases under

discussion was the motivation in the least obscure. If it is objected that a more prolonged inquiry would have revealed other important psychopathological material, our answer must be that psychotherapy based upon data elicited by the routine methods of psychiatric history-taking and examination enabled all six men to return to duty in a reasonably short time with some insight and with a will to carry on.

Case 1.—This man was a simple, stable Scotsman whose personality and past history were free from psychopathic features. After his first injury, movements of the elbow-joint had been very painful, and he had avoided using it so far as was possible, although, since he was back at duty, a good deal of pain was inevitable. The second injury, which resulted in the detachment of the common extensor origin, occurred before movement of the elbow had become painless and before he had regained confidence in it. This injury caused movements to become still more painful, and the hysterical prolongation of the immobilization by plaster was motivated by fear of renewing the pain. He accepted this explanation; he had no wish to leave the Navy, and, once he had been shown that movements were in fact no longer painful, he worked hard to become fit for duty.

Case 2.—This patient had experienced prolonged and severe stress in Russian and Malta convoys, including the torpedoing of his ship. His special duties as a member of the crew of an A.A. gun entailed much use of his left hand. He was worried about the safety of his wife, who was living in a target area, and he frankly said: "I think I have done my bit for this war." Three years previously, as the result of an injury to the same hand, he had been given four months' shore service and missed his ship. The second injury was taken more seriously; the hand was put in plaster for five weeks. It was not surprising, in view of the long strain and repeated enemy actions to which he had been subjected and the concession he had gained before from an apparently less serious injury, that the second injury should have been used hysterically to postpone his return to sea. The personality was extroverted and sound.

Case 3.—This man's parents had both had neurotic breakdowns, but he himself had shown no evidence of instability, although slightly backward at school. He had been a farm worker and was keen to go back to the land. After twice breaking his wrist, with an interval of fifteen months during which he was at duty, he developed a hysterical prolongation of the second injury, motivated by his desire to be invalided from the Navy. This desire was reinforced by the knowledge that since he had enlisted his job had been made "reserved." His co-operation was obtained, and he accepted his obligation to serve until the end of the war.

Case 4.—In this case a congenital deformity of the hand, of which he had always been rather ashamed, acted as a *locus minoris resistentiae* following a slight injury which occurred during a period of extreme emotional tension and danger. When he was drafted ashore on account of the ensuing disability the persistent anxiety was transferred to his new work—the responsible duty of servicing an unfamiliar type of aircraft. For him a hysterical disability provided a respite from danger and from responsibilities which had provoked a mild but persistent affective disturbance in a vulnerable personality.

Case 5.—This man was a long-standing neurotic. He had been a bed-wetter and had had nightmares up to the age of 11 years. He was a chronic nail-biter. At home he had often been in minor trouble: "I always preferred to go my own way." His work record was satisfactory, but he had fainted once while at work, and was kept in hospital for three weeks afterwards. He was prone to headaches and attacks of "tightness" in the chest associated with much belching; these symptoms were worse on exertion, but not related to food. He developed marked anxiety symptoms almost immediately after joining his ship, and had therefore to be drafted ashore. Here he worked well enough until he met with an accident, in which his right ulna was fractured. He was a man with a defective health-conscience, in whom hysterical prolongation, as a means of avoiding the anxieties and discomforts of active service, could probably have been predicted soon after he sustained his injury.

Case 6.—This man received a nerve injury during a most dangerous action. He had never been to sea before, but had worked satisfactorily in hospital as a sick-berth attendant. This alarming "baptism of fire," coupled with several superficial shrapnel wounds and a temporary ulnar palsy, made him wish to gain an honourable discharge from the Navy. He felt that he had earned this, and he acquired an exact knowledge of the symptomatology of ulnar nerve lesions. He showed the complacency, the power of self-deception, and the logical inconsistencies which are characteristic of the hysterical personality. He had worked in a bank, and although he felt unable to do any kind of work in the Service owing to his disabled right hand (his writing hand), he believed that he could carry out his duties without too much difficulty if he were allowed to return to the bank. As he said, "My manager has only one arm!"

The Influence of Personality on Prognosis

Two further cases will be briefly described in which psychopathic defects in the personality adversely affected the prognosis. In neither had there been any injury, but the clinical picture did not differ materially from that described above; in both the condition was recurrent. In one case the left hand was affected, in the other the right leg and foot. These two cases were admitted in 1940 and 1942 respectively.

Case 7 (Ordinary Seaman, aged 29).—This man came of a Naval family. His father was a Royal Marine pensioner and all his seven brothers were in the Navy. His mother had had several attacks of hysterical paralysis of the hand. He was brought up to join the Navy; no alternative was ever considered. He first joined in 1926, at the age of 15. He disliked the life from the beginning and never settled down, but the family tradition prevented his seeking his discharge. In 1930 his left hand, in the course of a few days, became swollen, painful, and weak. After nineteen weeks in hospital without improvement he was invalided from the Service. He was ostracized by his family and made unwelcome at home. Six months later, his hand having fully recovered, he rejoined in order to be accepted once more by his father and brothers. He concealed his previous invaliding for a time, but after a few weeks it was discovered and he was discharged as a fraudulent entry. Again he was disowned, but a transient recurrence of swelling, pain, and weakness of the left hand three or four times each year prevented his attempting to join the Navy again. He married, and for the next ten years, with his recurring disability as a face-saver, he was able to lead a restricted and lonely life, making no friends and cut off from his family. In Aug., 1940, he rejoined the Navy, but again found that he could not adapt himself to the life, and early in November his left hand became swollen, painful, cyanosed, and weak. He was admitted to hospital with the provisional diagnosis of "subacute rheumatism." Temperature, pulse, sedimentation rate, and radiographs of the hand were normal; there was no cervical rib. Physiotherapy, salicylates, and colchicum brought no improvement, and, in view of the long history and inadequate personality, psychotherapy was not attempted. He showed a marked emotional immaturity and dependency, being still strongly attached to his family, had a violent temper, and had frequently "fainted" at the sight of blood or on experiencing trivial pain. He was invalided as a case of hysteria.

Case 8 (Ordinary Seaman, aged 36).—This man's father was invalided from the Navy after the last war for neurasthenia. He was an anxious, depressive, ineffectual person with vague aspirations to become a teacher, although he took no steps to attain this end. He had for the past ten years earned three guineas a week as a pepper-grinder. In 1938, at a time when he was in financial difficulties which culminated in bankruptcy, his right leg "suddenly gave way" as he was rising from his chair, and he fell to the ground. He could move the leg, but it would not bear his weight. He did not see a doctor, but remained in bed for one month. He then began to get about, but complained of cramp-like pains in the calf if he walked above half a mile or if he climbed more than a few stairs. The pain would disappear after he had rested for some quarter of an hour, but the leg remained weak. Meanwhile, as he felt unable to go out, his wife attended to the bankruptcy proceedings, and for the time being relieved him of all responsibility. After a few months his leg ceased to give him any trouble, although he noticed that it had become, and remained, a little "thinner" than the left.

When he joined the Navy in Sept., 1941, he attempted to gain rapid promotion to petty officer by taking a trade test in engineering. He failed in the test and was bitterly disappointed at having to revert to "menial" tasks and less comfortable living conditions. His right leg again gave way, but recovered when he was drafted to another establishment to await a refresher course before attempting the test again. He felt, however, that he would not be successful. He obtained week-end leave, and his leg gave way once more as he left the train after completing his journey home. He was taken to his house and put to bed. Thence, in Jan., 1942, he was moved to a civilian hospital, where a diagnosis of thrombo-angiitis obliterans was made and intensive physiotherapy was given without improvement. In March he was transferred to a Naval hospital; here the condition was considered by the medical specialist to be hysterical, and he was transferred to this unit.

On examination there was wasting to the extent of 1½ in. in the right thigh and 1 in. in the right calf. There was extreme weakness of the leg, and he walked with impressive difficulty on two crutches, which he was persuaded reluctantly to abandon. The foot was cold and blue, and trophic changes were beginning in the skin. No sensory changes were found, although inconstant areas of diminished sensibility had been recorded previously. There were no signs of organic disease in the C.N.S., and in both feet the dorsalis pedis

artery pulsed normally. The C.S.F. was normal, the Wassermann reaction was negative in the blood, and there was no evidence of arteriosclerosis. The left leg and foot were normal.

Here again, in view of the psychopathic setting and the probability of relapse, psychotherapy within the Service was considered unlikely to be effective or worth while. He was invalided as a case of hysteria and was offered further treatment in an E.M.S. neurosis centre. He preferred, however, to return home, as he felt that he would "pick up" quicker there and be able to earn his living sooner.

Conclusions and Summary

A group of cases is described in which physical symptoms and signs of a distinctive character, hysterically produced or maintained, served greatly to prolong convalescence in six Naval ratings who had received injuries to the hand or arm. The importance of the early recognition of such psychogenic complications is shown by the rapid response to psychological treatment of a relatively simple kind, which was followed in all six cases by return to duty. The diagnostic criteria are discussed under three headings: (1) the physical findings; (2) the failure of physical methods alone and the good response to psychotherapy; (3) the demonstration, by the routine procedure of psychiatric history-taking and examination, of hysterical motivation. It is possible that psychogenic factors are sometimes overlooked in the differential diagnosis of vasomotor disorders.

Prognosis depends very largely upon the personality setting in which the hysterical symptoms occur. Two cases are described in which similar physical symptoms developed without previous injury or severe stress. In these patients the personality was markedly psychopathic, and similar illnesses had occurred in civilian life. Both these men were invalided from the Service.

The lay connotations of the term "hysteria" and the social worthlessness of many hysterics have given rise, understandably enough, to adverse moral judgments. These, however, are not justified in all cases of hysteria, and effective treatment, as well as justice, demands that a careful discrimination should be made.

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CHRONIC PULMONARY CATARRH IN CHILDHOOD

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The varying manifestations of recurrent non-specific respiratory infection occurring especially in childhood allow of numerous names and diagnoses being given. Chronic pulmonary catarrh represents a very large proportion of these cases, and this term also usefully describes the condition in the majority. Leys (1927) introduced this name, and his monograph dealt fully with the bibliography and history. He found descriptions of numerous chronic or subacute infective pulmonary conditions under various names which could most satisfactorily be grouped together by this term, which describes the clinical state concisely and usefully. This does not seem to have been adequately noticed, and textbooks and the like do not appear to recognize this common and troublesome condition.

During 1942 there attended my asthma clinic at the General Hospital, Birmingham, 63 children under the age of 14. Most were sent up by their doctors with the general diagnosis of asthma, others for investigation of recurrent bronchitis and persistent or recurrent coughs. In only 12 of these cases did it seem that the condition was a true allergic asthma, the criteria being the previous occurrence of infantile eczema, direct relationship between the attacks and foreign proteins, freedom from respiratory symptoms and signs between attacks, greater frequency in summer months, normal lungs physically