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SOMATIC MANIFESTATIONS OF PSYCHONEUROSIS

BY

IAN DOUGLAS-WILSON, M.D., M.R.C.P.Ed.

Capt., R.A.M.C.

A striking feature of psychoneurosis observed in the Services during this war has been the frequency with which somatic symptoms are presented. As the underlying mental disorder is usually revealed only by direct inquiry, such cases are commonly referred for investigation to the general physician. The object of this paper is to indicate how a positive psychiatric diagnosis has been reached in cases of this type without recourse to the negative exclusive method of diagnosis, which, as Cook and Sargent (1942) have pointed out, is both costly in time and money and harmful to the patient.

Of 810 patients sent for a medical specialist's opinion to a military hospital in England, 231 were diagnosed as psychoneurotic. Of this number 202 reported with symptoms referred to a particular part or to several parts of the body. Cases with organic disease have been excluded from the series except where the mental factor predominated. Psychoneurosis is taken to include anxiety state, hysteria, neurasthenia, and obsessive neurosis. The cases must be regarded as selected, because most patients with psychiatric conditions, recognized as such, were referred direct to the psychiatrist.

Personal and Family Histories

The standards employed by Symonds and Russell (1943) in their investigation of head injuries were adopted for eliciting psychiatric histories. A history of mental disorder in close relations, of personal predisposition, or of actual previous psychiatric illness was recorded in 92% of all cases. The conditions were initiated, with one exception, without exposure to the strain of actual warfare. It is therefore not surprising that the percentage of predisposed subjects is higher than in Love's (1942) casualties at Tobruk and Symonds's (1943) cases of flying stress. The absence of personal or family predisposition was taken as an indication for redoubled caution in applying a psychiatric diagnosis. The constitutionally stable tend to develop psychoneurosis only after severe stress, the nature of which was usually elicited for the purposes of diagnosis. Some of the factors determining onset have been discussed elsewhere (Douglas-Wilson, 1943).

Presenting Symptoms

Symptoms were presented in the following order of frequency (231 cases):

<i>Focal symptoms</i>		202 (87.4%)
Dyspnoea, palpitation, precordial pain, etc.		53
Headache		52
Respiratory symptoms		36
Abdominal symptoms		25
"Rheumatism"; other motor and sensory disturbances		23
Urinary symptoms		13
<i>General symptoms</i>		29 (12.6%)
Nervousness		7
Lassitude		6
Amnesia		4
Dizziness		4
Rare symptoms		8

These figures are for the symptoms mentioned first or given greatest prominence by the patient. They do not reflect the total incidence of each group of symptoms. Combinations of two or more groups were common. For example, dizziness, though it was the primary complaint in only four cases, was a frequent subsidiary symptom, especially where the patient complained chiefly of dyspnoea, headache, or cough.

1. Cardiac Symptoms

The impression that the so-called "effort syndrome" is a manifestation of anxiety state has been strengthened in the last four years, though some cardiologists are not satisfied that it is entirely a psychosomatic manifestation. Wood (1941), in a careful analysis, found a family history of nervousness, insanity, or epilepsy in 56% of his cases, and noted that they showed "constitutional timidity and character inferiority."

Personal and Family Histories.—Of the 53 cases in this group 50 gave a positive family history of mental disorder or of personal predisposition. Sixteen were intellectually below average, and two illiterate. Thirty-one of the patients had been in civilian employment demanding little physical exertion. The three with no personal or family predisposition had all been submitted to extrinsic influences that had directed attention to the heart. One, after a long period in hospital with rheumatic fever, had received medical advice that strenuous exertion should always be avoided. The second was a man of 40 who, after prolonged sedentary employment, went on a battle course, where he was alarmed at his inability to keep up with younger men. The third was a man of 35, with a poor personality, who had done no work on account of weakness and palpitation since he had had rheumatic fever ten years previously.

Aetiology.—Physical and emotional stress, infection, and trauma are recognized as important aetiological factors. The induction of symptoms by suggestion through prolonged confinement to bed or by doctors' or relatives' warnings was found in 14 cases. It was noted that, whatever the reason for the patient's having been confined to bed—it varied from head injury to "nervous breakdown"—the patient himself had supposed that it was because of "something wrong with the heart." Not one of the patients that had been instructed to "take things easy" had sought further advice after the initial warning, which had been scrupulously observed in every case but one. In one case the condition appeared to be a specific response to conditions of war:

A corporal aged 49 had had palpitation, dyspnoea, and precordial pain while serving with the German Army in the First Great War. The symptoms subsided at the end of the war. After experience of a concentration camp he developed an anxiety state, but he had no further symptoms referred to the heart until he entered the British Army during the present war. The symptoms of which he had complained in the first war then recurred, though his Service employment was limited to the light work of a storeman, and he was considerably freer from physical and mental stress than he had been in Germany.

Several factors contributed to the production of the condition in some cases.

A private aged 39, with 15 years' unbroken service, reported with dyspnoea of one year's duration. His symptoms had started when he was transferred from a sedentary job to an active training unit. He said that he could run only 50 yards, when "everything went black" and he got stabbing precordial pain and palpitation. The symptoms had been worse in the last six months since a brother had been discharged from the Army owing to heart disease. A sister, killed two years previously, had had heart disease, and another brother was excitable and nervous. The patient had had a sub-average school record and, after several jobs as a labourer, had entered the Regular Army. He had liked his previous employment, in which he had apparently given satisfaction, but had not adapted himself to his new work. He had difficulty in keeping up with younger men and in learning new training: "it worries me that I will not please." He had been a bed-wetter till the age of 15, had recently had frequent sustained heavy headaches, was sleepless, and was subject to nightmares. He was depressed if not occupied, constantly recalling the death of his mother, who had been killed in an air raid two years before. He was absent-minded, had difficulty in mental concentration, and was tremulous and sweating under strain. He was unmarried, of temperate habit, and had a blameless Service record. He was mentally slow, tense, anxious, and co-operative. Physique was only fair, and he looked older than his years. There was no other evidence of organic disease.

The Clinical Syndrome.—The average age of the 53 patients was 31.1 years. Symptoms prior to enlistment were claimed by 25, in all of whom the condition had been aggravated by Army service. In two cases symptoms had first developed between the time of medical examination and mobilization. Particular help in diagnosis was obtained by tracing the relationship of onset and exacerbation to mental stress. In every case it was admitted that the amount of exercise required to induce symptoms varied. Dizziness, palpitation, "black-outs," and sighing for breath were further distinguishing features. Precordial pain was claimed in 42 cases, but its character seldom suggested organic cardiac disease. It was most often described as shooting or stabbing (20); less frequently as aching (7); drawing, pulling (3); cramp-like (3); and rarely as throbbing, tight, tearing, or "a strained feeling." More bizarre descriptions were given in three cases. Little help was obtained from examination of the cardiovascular system in the mild cases that constitute the majority in this series. Phobias or obsessions were admitted in 9 cases. These consisted of a sense of being gripped by the throat, associated with inability to wear anything round the neck; a feeling of suffocation in bed; an urge to breathe deeply "because no air is coming in"; and awaking with a sense of impending dissolution.

The psychiatric background in these cases has been the subject of detailed analyses (Wittkower, Rodger, and Wilson, 1941). The personality types most often encountered in this series were: (1) the immature, dependent type, usually querulously hypochondriacal; (2) the aggressive, resentful subject, who speaks defiantly of "my leaking valve" and resists reasoned reassurance; (3) the patient of inherently unstable temperament, with marked predisposition or actual previous history of psychiatric illness; (4) the artistic, "highly strung" man, with little liking for or adaptability to Service life; (5) the constitutionally stable type, who develops cardiac symptoms as an isolated manifestation after gross physical or emotional stress or after strong extrinsic direction of attention to the heart: in the Army, the most striking example of this group is the soldier of 35 to 40 who is called on to undertake strenuous training alongside younger men.

2. Headache

One hundred and thirty-one, or 57% of all cases, reported the presence of headache. This was described as heavy (34), pressing (32), aching (22), tight (12), throbbing (11), beating (5), shooting (5), tugging (3), and numb (2). Bizarre descriptions were given in five cases. The pain was said to last for many hours or days with little variation in intensity, or to come on in the mornings and to pass off about midday. It was sometimes aggravated by exercise, worry, excitement, heat, or a visit to the cinema. Partial relief was sometimes admitted by holding the head, mental diversion, and aspirin. In other cases no aggravating or relieving factors were recognized.

Twenty-seven of the 52 men with headache as the primary complaint dated their symptoms from previous head injury. It

is noteworthy that 11 of these were intellectually dull. These patients, even more than those complaining of headache without previous trauma, were preoccupied with the condition of their heads, and, in particular, with the possibility of further head injury. Two had made complete recoveries from severe head injuries and, after further trivial trauma, had developed gross psychoneurotic states with persistent headaches.

Of the 25 patients who had not been injured only two were intellectually below average. The development of headache as an isolated symptom of anxiety was recorded in four patients of conscientious type and excellent intelligence.

A padre in the middle thirties, who had been with a division that had seen much fighting, reported with unremitting pressing headache. He had been troubled by conflict between a sense of obligation to return to his division and fear that he might not continue under battle conditions to show the example that he felt was due from him.

Patients complaining of headache are sometimes preoccupied with fears of insanity or brain tumour. Dizziness and "black-outs" are common associated symptoms. The "black-out" is described as "a mist coming over the eyes" or as "a curtain drawn over the eyes."

3. Respiratory Symptoms

The complaint in each case of this group, whose average age was 29.9, was cough. No case has been included in which there was any abnormality on routine physical and radiological examination, and, in particular, cases of asthma have been excluded. There is no basis for regarding cough as either an expression of hysteria or a manifestation of vegetative neurosis. It is probable that some degree of tracheitis was present in each case. That tracheitis is prevalent in the Army is suggested by the questioning of 100 healthy controls, of whom 62 reported a persistent "smoker's cough."

The most frequent factor determining the patient's preoccupation with his chest was found to be family or personal experience of chest disease. Eighteen of the 36 cases gave a family history of tuberculosis in parents or siblings, and admitted to fear of this disease. Eleven others had had previous serious chest disorders, such as pneumonia. The cough was typically present throughout the year, with little seasonal or diurnal variation. A small amount of sputum was said to be expectorated. Some patients, especially those who had witnessed tuberculosis in their families, claimed loss of weight, night sweating, and even haemoptysis. Pains in the chest were reported in two-thirds of this series: it was described most often as tight, aching, or shooting; rarely as burning, searing, or heavy. Gross dyspnoea on exertion was reported in all except two cases. One of these had previously had pleurisy and feared tuberculosis. The other, as well as cough, had stabbing precordial pain and palpitation, and was alarmed at the possibility of heart disease, of which his mother had died. Twelve patients, in addition to dyspnoea, had other symptoms related to the heart. Of these, two, though their initial complaint was of cough, later admitted preoccupation with the possibility of heart disease.

4. Abdominal Symptoms

The true proportion of psychoneurotics presenting abdominal symptoms is not reflected in this series, as abdominal cases were mostly seen at a separate clinic, experience of which suggests that the syndromes presented fall commonly into one of these groups:

(a) The patient complains of vague diffuse pain, the site of which is indicated by sweeping the hand across the upper abdomen. It may be described as aching, burning, sharp, or heavy. It often dates from youth, is unremitting, and is progressive only from entry into the Service, this progression being attributed to "greasy food." It is constant throughout the day, but does not interrupt sleep. It is worse after meals, and alkalis provide, at best, only partial relief. Flatulence is prominent, and vomiting after all meals may be reported. The bowels are usually constipated. A family history of gastric disorders is forthcoming in half the cases. Examination shows no recent loss of weight. There is diffuse upper abdominal tenderness without special localization. Aerophagy may be witnessed, and, in hospital, vomitus is found to consist of a mouthful or two of fluid regurgitated soon after meals. Temporary relief may be obtained by dieting, but, as Tidy (1943) has pointed out, relapse occurs as soon as the patient is discharged from hospital.

(b) The patient presents a group of symptoms that are compatible with peptic ulceration. The barium meal shows a hypertonic active stomach, and the fractional test meal may reveal hyperchlorhydria.

(c) The patient reports on account of constipation, lenteric diarrhoea, or griping lower abdominal pain. A spastic colon may be palpated.

(d) A bizarre picture is presented. An officer aged 32 gave a five-months history of constant unvarying nausea and "sense of apprehension" in the umbilical region. It was found that the symptoms had begun when he heard that his wife was pregnant.

5. "Rheumatism"; Other Motor and Sensory Disturbances

Twenty-two patients reported with muscle or joint pains. The localization of pains in five was accounted for by previous trauma or operation. Of the remainder, the factor determining localization could be detected in only one case—that of a patient, aged 41, who had had "a clawing feeling" and sense of coldness in both knees for nine years, since the doctor treating him for gonorrhoea had said that rheumatism might ensue as a complication. In the other cases pain was described as being in either muscles or joints, and was said to be constant and often symmetrical. It was most commonly aching, less frequently shooting, numb, pulling, cramp-like, or "a flushed feeling." Associated weakness was found in only one case, and no disturbance of cutaneous sensation was detected. Two patients who reported with lumbar pain admitted to preoccupation with the possibility of tuberculosis, of which there was a family history in each case.

One man, aged 31, with gross variable tremor of the right upper limb, reported that this had been present since a blow in the mid-thoracic region of the back at the age of 12.

6. Urinary Symptoms

The 13 patients reporting with urinary symptoms were juvenile immature types who particularly missed their home environments. Seven patients, five of them grossly dull and backward, reported nocturnal enuresis from infancy. All had noticed recent aggravation of the symptom. This was attributed by five to self-consciousness under Service conditions: one had noticed exacerbation since he had married, and the last dated the increase from the incidence of business worries. Six cases reported the recent onset of frequency, three of these having also recent nocturnal enuresis. Four of these patients were mentally dull. The onset in three had been associated with fears of venereal disease following exposure to infection. In the other three the symptoms had begun on enlistment, which had been associated with concern about separation from families. One of these patients, aged 39, gave a story of regular and classical migrainous attacks from enlistment two years previously. These simulated exactly the migraine to which his wife had always been subject.

Discussion

Patients in this series, although their symptoms were predominantly somatic, readily admitted, on direct questioning, to concomitant mental manifestations. Where the onset was recent they quickly gained insight into the psychological origin of their condition. This coincides with the experience of Gillespie (1941) and others that the so-called "war neuroses" arise at a superficial level and seldom result in permanent personality changes.

Symptoms often coexisted in more than one system. For example, 81 of the 178 cases that did not primarily claim cardiac symptoms reported, as subsidiary complaints, dyspnoea, palpitation, or precordial pain. It appears undesirable that psychoneurotic states should be classified into such categories as "effort syndrome," because such grouping focuses unwarranted attention on a single aspect of the condition and, as Hyland and Richardson (1942) have pointed out, tends to obscure consideration of the underlying personality disorder.

Evidence of personal predisposition or a history of psychiatric illness in close relatives was found in most cases. Important factors determining the localization of somatic symptoms were existing trivial organic disorders; previous personal or family history of organic disease in the affected system; and recall of earlier warnings by doctors and relatives about the condition of the system involved. In some cases with cardiac symptoms prolonged confinement to bed had fixed attention on the heart; while in others the strenuous Service life had contributed to the localization. In most cases where a factor determining localiza-

tion was found, the patient admitted to fear of organic disease. The patient did not always refer symptoms to the system in which disease was feared.

In the remaining patients no factor determining localization could be found. These mostly had symptoms that were directly attributable to autonomic imbalance, such as "hypertonic gastritis" and frequency of micturition. It appears that revision of nomenclature is necessary to differentiate such "functional" conditions in which there is definite physiological disturbance, from those in which physiological disturbance is absent or unproved. This could best be effected by discontinuing the use of "functional" to describe either type.

The manifestations of anxiety state are now generally attributed to dysfunction of the sympathico-adrenal reflex. More speculative psycho-analytical work suggests that the site of symptoms is conditioned by profound mental factors, the physiological response varying with different emotional tensions (Alexander, 1943). Whatever the ultimate cause, there can be little doubt that the immediate cause is organic, because, whatever the system affected, the symptoms tend to conform to fixed patterns. Divergence from these patterns suggests that the condition is attributable to hysteria or that the symptoms of vegetative neurosis have suggested to the patient hysterical features which have been superadded.

Summary

The presenting symptoms in 202 cases of psychoneurosis reporting with somatic manifestations have been analysed. Predisposition to mental disorder was found in nearly all cases.

Important factors determining the localization of symptoms were found to be family or previous personal history of organic disease in the system involved and existing trivial organic disorders.

Cardiac symptoms had been suggested to some by long confinement to bed or by warnings to avoid exertion. In others, the energetic Service life had directed attention to the heart. In several, more than one extrinsic factor had produced the condition. Associated phobias were sometimes present.

Chest symptoms were commonly associated with fear of tuberculosis, of which there was a family history in half the cases. Gross dyspnoea was the rule.

Headache was seldom of a type that suggested organic disease. The patient was often preoccupied with the possibility of brain tumour or insanity, and—where the condition followed head injury—with the possibility of further trauma.

Abdominal symptoms, except when due to hysteria, tended to conform to one of three groups of symptoms. In some there was definite physiological disturbance.

Urinary symptoms were reported by patients of immature and dependent type.

Somatic manifestations, when due to anxiety states, usually conform to definite recognizable patterns. Symptoms often coexist in more than one system.

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Last July tens of thousands of contributors to the Hospital Saving Association decided to mark the 21st anniversary of their Association by a free-will offering of thanks to hospital nurses. They raised £12,000, which will be devoted to providing much-needed scholarships. These will be awarded annually over the next four years as follows: two scholarships for nurse dietitians of £250 each, four for nurse teachers of £200 each, four for health visitors of £105 each, twelve for industrial nurses of £65 each, and four for midwife teachers of £75 each. The Rushcliffe report brought some improved conditions for nurses, but the proper training of new entrants will still depend upon competent teachers. H.S.A. scholarships will go a little way to securing these teachers and may stimulate others in the provision of postgraduate educational facilities.