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Affective Equivalents

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Introduction

Since its first formulation, the concept of manic-depressive illness has been subject to successive modification and, on the whole, to progressive enlargement. It was Kraepelin, following on the attempts of Baillarger, Falret and Magnan, who grouped together all the various nosographic forms distinguished by isolated depressive or manic crises, periodic or alternating (and even the form designated as involutional melancholia), including them all under the sole class name of manic-depressive psychosis. The morbid entity thus defined was regarded as distinguished by the periodicity of the crises, each with a tendency towards social remission. Aetiologically the causation was seen as preponderantly hereditary.

Some of Kraepelin's successors, such as Lange, Schneider, Bumke and Kretschmer, brought further definition and clarity to the concept with their studies of the prepsychotic personalities of manic-depressive patients and their heredo-biologic relationships. In the course of this work, to the central group of manic-depressive states there were added the marginal syndromes of constitutional depression or dysthymia, the hypomanic constitution or hyperthymia, and the cyclothymic constitution or cyclothymia. Kretschmer gave solidity to this structure by demonstrating the relationship between the pyknic physical type on the one side and manic-depressive illnesses, cycloid personalities, and the cyclothymic temperaments on the other.

Still more recently Lopez Ibor (1950) has extended the manic-depressive concept by including within the wide thymopathic circle the states of anxiety of endogenous causation, to whose existence he has drawn attention. In this wider circle, Ibor includes all disorders of the so-called vital structure of the personality, the endogenous melancholias and manias, the anxious thymopathy and certain forms of asthenia.

So it has come about that what today we call an endogenous affective disorder corresponds to a wide concept, which has lost none of its primitive Kraepelinian characteristics, but also includes marginal constitutional states and periodic forms of disturbance in which there stands out, as the fundamental pathology, a primary disturbance of affect. This fundamental disturbance, the symptomatology of which indistinctly appears as successively or simultaneously melancholic or manic, with variable free intervals, distinguishes itself by occurring with greater frequency in individuals who deviate from the norm along particular mental and physical dimensions. On the one hand they tend to be of the pyknic type, and on the other hand to show the cyclothymic or thymopathic personality, marked by great affective lability, readily varying in mood towards sadness or obsessive anxiety, cheerfulness or anger.

It is within this wide manic-depressive or thymopathic concept that we suggest the inclusion of certain monosymptomatic forms of a psychic and somatic nature, which on the basis of the material studied give evidence of being connected with a latent subdepressive or hypomanic predisposition.

The Material

The clinical material was derived from the Bethlem Royal and Maudsley Hospitals, made available through the Genetics Unit of the Institute of Psychiatry of the University of London, and was investigated over a period of twelve months from February, 1956 to January, 1957. At that time, in the systematic collection since 1948 of patients born one of twins in the

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records of the Unit, there were 107 cases in which affective symptoms were prominent. The case-notes of these patients were examined, and 47 were eliminated after careful consideration as not conforming with our standard of diagnosis. We were accordingly left with 60 patients with twins of the same sex who had survived into adult life and who had suffered from affective disorders of an endogenous nature. The patients themselves and their twins were followed up, with investigation of the entire history, infancy, scholastic, sexual, professional, social and pathographic; detailed accounts of the lives of other first-degree relatives were also obtained. This material was the subject of a thesis for doctorate in the Faculty of Medicine of the University of Oporto, and has been published in that form (1959).

The results of this investigation, strictly regarded, are not germane to the present paper, but are perhaps of sufficient interest for brief mention. There were 21 MZ and 39 DZ pairs, with concordance figures of 75 per cent. in the MZ pairs and 38·5 per cent. in the DZ pairs. The incidence of affective disturbance in other relatives was for the parents 23 per cent., for the siblings 19 per cent., and for the children 22 per cent. The author accepted Slater's hypothesis of a single dominant gene of incomplete penetrance, and would attribute to such a gene the predisposition to affective disorder and the cyclothymic personality, without regarding it as responsible for the entirety of affective disorders. One conclusion of relevance to the present paper was that depressed, hyperthymic, cyclothymic and anxious personalities were connected with the nuclear syndrome.

Peripheral Features of the Dysthymic Syndrome

The purpose of the present paper is to report certain features of a less obvious kind, which yet emerged from a more prolonged study of the case material. We examined particularly the variations of a cyclothymic and cycloid kind which occur over the course of time in the probands themselves and in the members of their families. These variations show up mainly through recurring crises of overactivity, irritability and insomnia, or by a prolonged alteration of affective state shown in a feeling of fatigue and in manifestations of anxiety or hypochondria. These are manifestations of a kind included by Ibor in his concept of thymopathia. Symptoms of a more psychosomatic kind which showed up in our material were frequent occurrences of crises of periodic headache, some cases of recurring pre-menstrual tension, and periodic or alternating crises of diminished or exacerbated libido.

Over and above these, our attention was caught by the relative frequency with which disorders, predominantly somatic in their mode of expression, some of them commonly known as organ-neuroses or psychosomatic syndromes, were periodically repeated. These phases occurred both separately from endogenous affective states and in association with them, and at other times preceding them or alternating with them.

Throwing together all the observed members of manic-depressive families, including the probands, their twins and other blood relatives, we found a number and variety of disturbances of more or less cyclic nature, which could be classified under the headings:

(*a*) Rheumatoid, neuralgic and lumbago crises, appearing periodically in 5·5 per cent. of probands, twins, parents and siblings;

(*b*) Periodic asthmatiform crises, in about 3 per cent.;

(*c*) Crises resembling those of peptic ulcer, with severe gastric symptoms, with improvements and relapses, in 3·5 per cent.;

(*d*) Crises of eczema, erythema, psoriasis, neurodermatitis, and dermatoses of a recurrent nature, in 3 per cent.

The distinguishing features of these crises is their tendency to recover and relapse, their stubbornness in yielding to the various somatic and pharmacological methods of treatment, their tendency to spontaneous disappearance, and their frequent association with endogenous mood changes. Furthermore, it is noteworthy that in some patients these somatic manifestations completely disappear after the first straightforward attack of periodic depression.

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As an example, we may shortly consider the case material of asthmatiform attacks. One patient (proband) had asthmatic crises frcm the age of 36 years. When aged 42 she had her first true depressive attack, which then periodically recurred. Up to the time of final follow-up at the age of 48, she had had no further attack of asthma. Another hypertensive proband suffered from crises of shortness of breath, of asthmatic type, at the ages of 57 and 59. On each occasion the illness continued for some months in spite of treatment, and then ceased, apparently spontaneously. At the age of 62 she began to show symptoms of involutional depression; and she was getting over this state when last seen at 64. Yet another manic-depressive proband had two brothers, each of them asthmatic subjects, one being of garrulous and euphoric disposition and the other one of syntonic temperament. The sister of a proband suffering from recurrent depression herself complained of intermittent asthmatiform attacks from the age of 68 after having fallen into an agitated depression with suicidal tendencies. In yet other cases the last asthmatiform crisis passed off into a state of depression.

If we were to take the other somatic syndromes mentioned, we could match the above examples with very similar ones. The relationship between somatic syndrome and cyclothymic constitution seems to be particularly clear in the dermatological cases. There were no fewer than three probands with a tendency to eczema or recurring erythema, who passed, after a phase of euphoria or hyperactivity, into an attack of "herpes zoster", which was then followed by a state of depression. There are cases, mainly in personalities of the hypomanic type, where a dermatosis coincides with or antecedes a break in activity, a period of insomnia or a loss of self-confidence. Thus one proband suffered for the first time at the age of 24 from a neurodermatitis lasting about five weeks, during the whole of which there were also symptoms of trembling and insomnia. From the first attack in 1948 until 1951 she suffered from such attacks annually, all of them lasting about the same length of time. After 1951 the neurodermatitis disappeared, and the attacks became very clearly of an anxious-depressive type, of longer duration, and accompanied by severe feelings of tiredness.

As an example of the same mechanism underlying rheumatic complaints, we may mention a patient of depressive personality, who first presented with the complaint that for three years he had been suffering from pains of rheumatic type and paraesthesiae in the dorsal-lumbar region, and from loss of weight. He would work for some days or weeks and then have to give up. Neurologists and general practitioners had all found his complaints to lack any organic basis. His twin brother, who is of an excitable cyclothymic nature, had suffered from depression at 17 after the death of the father, and complains from time to time of similar rheumatoid pains.

One patient (proband) who had suffered from three marked attacks of periodic depression at the ages of 33, 36 and 41, complained insistently of recurring gastric troubles since the age of 17; an ulcer was diagnosed at 36, and operated on at 40. Another patient had a long endogenous depression from the age of 38 to 41; her twin had to be sutured for a perforated gastric ulcer, and at 41 underwent a subtotal gastrectomy as a result of a serious relapse of the ulcerous state, with accompanying pains, vomiting and loss of weight. In this connection it must be recollected that a number of workers, most recently Parker *et al.* (1959), have drawn attention to an incidence of duodenal ulceration greater in manic-depressive patients than in the general population.

The four relatively common varieties of somatic disturbance already discussed do not exhaust all the ways in which a somatic reaction may appear as an affective equivalent. In one family, for instance, a proband, her brother and a daughter suffer from endogenous affective disorders. The twin sister, who is pyknic and syntonic, between the ages of 39 and 43 complained of feelings of coldness in the extremities, especially in the hands. These complaints were so persistent and so intense that she was eventually taken to be a case of Raynaud's disease. However, at the age of 43 the symptoms spontaneously disappeared. Another patient, one of the probands, complained of similar symptoms at the ages of 47 and 49; she under-

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went a sympathectomy, after which she fell into a depressive state which became periodic. However, the evidence for cyclic recurrence of symptoms of this kind, and of certain other suspect symptoms such as humming in the ears and feelings of vertigo, is not convincing, as it is in the case of the four types of disturbance discussed previously. It may be that one should not regard them as true equivalents.

Discussion

If we attempt to relate the type of personality with the type of somatic disturbance, then it seems probable that cyclothymic-obsessive personalities and cyclothymic-worriers predominate among the subjects of periodic rheumatoid attacks; among asthma subjects cyclothymic-worriers and the cyclothymic-irritable personalities; in gastric subjects there is a predominance of syntonic and depressive personalities; and in eczema subjects cyclothymic and hypomanic personalities. All these personality types are basically affective, and it was found that 60·3 per cent. of all these individuals suffered, at least once, from a more or less typical endogenous affective disorder.

It must not be supposed that we are suggesting that *all* the crises of peptic ulceration, rheumatism, lumbago, asthma, etc., which are reported in members of cyclothymic families are to be regarded as affective equivalents. Nevertheless symptoms of these kinds, when occurring in thymopathic personalities and showing an obviously recurrent tendency, have in our opinion the same value, and up to a certain point the same aetiopathogenic meaning, as the cyclic changes which are universally recognized—crises of hyperactivity, irritability and insomnia, fatigue, headache, anxiety or hypochondria. This idea has been expressed previously. Thus Lange noted that "in biological catastrophes which are the cause of melancholia, organic alterations of all types easily develop, including some which only appear at those periods, as is the case of certain gastric ulcers". Similarly, Baruk (1959), Barcia and Amat (1958) and Ibor have described various types of headaches and neuralgias connected with endogenous depression. Baruk particularly suggests that certain periodic algias may constitute true equivalents of manic-depressive psychoses. It is also noteworthy that psychiatrists of psycho-analytic schools (MacCurdy, 1925; French, 1939; Antonelli, 1955; Garma, 1957) have repeatedly drawn attention to dynamic relationships between many of these states and manic-depressive forms of illness.

Our approach, however, is not to stress the element of predominantly libidinal conflict, but rather to regard these psychosomatic syndromes as potentialities of expression of a predisposition conceived in global anthropological terms, the thymopathic constitution. On this basis, the symptom or group of symptoms is significant not only in its interpretation as the result of present or past emotional stress, but mainly as a link in an aetiopathogenic chain, of which the roots lie in the heredo-biological factors which determine personality. Only a detailed knowledge of all the preceding elements, personal and familial, will enable us to understand the story of the illness in the individual case.

This concept lies close to the general formulation of psychobiology by Adolf Meyer. We accept his view that pathological states are reactions or defects of adaptation, and that their expression is the ultimate result of a dynamism in which constitutional and environmental factors are always intertwined. Furthermore, these states may vary in their intensity and even in their quality. On this ground the designation of affective disorder is to be preferred to that of manic-depressive psychosis. Our pluridimensional concept differs from that of Meyer chiefly in attributing far greater importance to the heredo-constitutional structure, here as in psychoses generally. The stresses of living, impinging on this structure, may release pathological modes of expression, which however follow certain patterns, which in turn indicate an appropriate therapy.

Making use of this concept, it is still necessary to explain how a disturbance affecting diencephalic centres is transferred to effector organs or apparatus. The hypothesis suggests itself that thymopathic somatic manifestations would appear for preference in persons whose neurovegetative systems were either labile or in-

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sufficiently mature. Through a dominant hereditary factor, the cyclothymic or thymopathic individual becomes predisposable to affective disorders; the disorder is the more likely to appear if there is also an immaturity of the neurovegetative system by which certain organs or functional systems are relatively endangered (the digestive system, the skin, etc.). Though this hypothesis looks speculative, it can be tested by observations; one may recall such cases as that of the patient in whom a sympathectomy relieved a Raynaud syndrome, leaving a periodic depressive syndrome in its place.

This very general concept of affective disorders, which we might call the visceral-diencephalic concept, has consequences for the problems of therapy. In our view, patients troubled by the psychic and somatic "equivalents" of affective disturbance to which we have drawn attention are in need of strong psychotherapeutic support in addition to any necessary drug therapy. Since such periodic states probably obey inner rhythms, with the possibility of spontaneous remission at any time, we should as far as possible avoid having recourse to our extensive arsenal of therapeutic weapons of a somatic kind. Clearly, if hypomania should follow on an "equivalent", with the resulting disorganization of social behaviour, or if there should be insomnia and thoughts of guilt and suicide, then such energetic measures as E.C.T. may have to be taken. But in the absence of such critical developments, one should not propose, nor will the patient willingly accept, the more drastic treatments such as those involving temporary deprivation of consciousness.

Psychotherapy, on the other hand, can be of great value to the patient, by giving him an understanding of his state, by helping his adjustment to the symptoms, and by protecting him against the environmental stresses to which his thymopathic disposition is particularly susceptible. A supporting psychotherapy of this kind helps to distract his attention from his somatic state, which by itself is generally very resistant to ordinary methods of treatment; and it prevents the tendency for dysaesthesiae and unpleasant feelings of all kinds to become fixated in a neurastheniform or hypochondriacal personality change. The aims of this treatment are: (*a*) to maintain the patient's confidence in himself and his future, to reduce his nervous tension, and to withdraw his attention from his symptoms; (*b*) to raise his capacity to deal with the stresses of day-to-day life; (*c*) to maintain a certain degree of supervision over him, so as to be able to take immediate action in the event of an unmistakable affective crisis.

Such psychotherapy will, in our opinion, become more and more efficient as progress is made with pharmacotherapy. The new psycho-inhibitors and psycho-stimulants offer sure prospects of controlling these illnesses. Indeed, as matters stand already, this group of illnesses seems to be a particularly appropriate field for allying psychotherapy with moderate doses of drugs such as certain ganglioplegics, thymoleptics and monoaminoxidase inhibitors. The way in which such a combination of drug therapy and psychotherapy would be used would depend on the individual features of the case, particularly the predominant mood state and the nature of the basic personality.

Summary

The clinical material observed consisted in 60 patients of the Bethlem Royal and Maudsley Hospitals, all of them with affective disorders, and all of them with same-sexed twins, monozygotic or dizygotic. Also included are the twins of these patients and their other first-degree relatives.

In the family circle of these patients it was found that certain somatic or psychosomatic syndromes appeared with unusual frequency, especially syndromes resembling rheumatism, asthmatic attacks, peptic ulceration and certain dermatoses. Attacks of such psychosomatic syndromes were found to have definite time relations with the phases of alteration of mood; they also themselves tended to run a cyclic course with tendency towards spontaneous remission.

It is proposed that syndromes of these kinds appearing in persons of predisposed personality should be recognized as "affective equivalents", i.e. as alternative modes of manifestation of the

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basic diencephalic disturbance which we suppose to underlie the mood changes of endogenous affective disorders. This viewpoint is discussed, and suggestions are made on the subject of treatment.

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