# ANXIETY: ITS NATURE AND TREATMENT.

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(*Concluded from p.* 512.)

## PART III.

## The Treatment of Anxiety.

### THE FOUR STEPS IN TREATMENT.

If anxiety be regarded as it is in this paper, as an energic problem, then the treatment of psychoneurotic, and to some extent of psychotic reactions, can be summarized under the following four headings:

1. Translate the problem into terms of anxiety. Explore the outskirts of consciousness so that any unwitting causes of anxiety are brought into clear-cut focus, and can be attacked and possibly solved with the utmost economy of energy. One would, for example, attempt to convert an hysteria or obsessional neurosis into a straightforward anxiety reaction by such an exploration; one is then in a position to tackle the anxiety. This is essentially a form of psychological analysis.

2. Find an adequate outlet for the energy that is bound up in the anxiety.

(*a*) In the first place, remove the internal obstacles: that is to say, remove the obstacles offered by wrong personal viewpoints, wrong attitudes to one's self, to society, to one's sexual and other impulses and so on. This is effected by a more or less detailed explanation, and permits of a psychological synthesis.

(*b*) In the second place, remove as far as is possible the external obstacles, the real, social, economic, racial and other obstacles, and correct or allow for, innate defects as far as is possible. This is effected by some form of social treatment or "sociotherapy".

(*c*) In the third place, find a direct outlet or, *faute de mieux*, an indirect (chemical) outlet for the visceral or metabolic hypertensions which are responsible for the anxiety.

(*d*) Fourthly, it may be necessary to condition the adaptive activities and outlets that have been found, more permanently by habit, by the tonic effect of success, and by a maintenance of the "transference" for as long as is necessary.

3. Failing this, avoid or reduce the specific stimuli that tend to maintain tension and anxiety. This can be done by socially coddling or "cotton-woolling" the individual, or by "cotton-woolling" him against the sensory bombardment of the environment by drugs acting on the cortex and sensory

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functions, and belonging to the second group in Pick and Molitor's classification, which we are to discuss shortly.

4. In the last instance, combat the residual unavoidable anxiety by "supportive" treatment: that is to say, by artificial reduction of the total amount of energy available in the body. This may be done by depleting the autonomic system of its superfluous energy, or by depressing autonomic activity; the action is either depletive or depressant, but for convenience we consider both actions under the term "supportive" because in a sense they artificially support the organism.

For this purpose such drugs as sandoptal, medinal and others of the urea group of hypnotics, indeed all drugs belonging to that group in Pick and Molitor's classification which act on the subthalamic centres, are effective; probably also morphine; also such physical means as muscular relaxation, hot baths, a relaxing climate and so on. The "supportive" treatment of anxiety has been unjustifiably despised and neglected.

To summarize, the problem of anxiety is: to expose the particular segment or viscus under tension; to allow it to discharge itself directly or even indirectly as far as possible; failing that, to withhold nocuous stimuli which tend to maintain tension; in the last instance, to diminish the total amount of energy available in the organism, and with it the degree of autonomic hypertension. These stages we are about to discuss in more detail.

### *Translating the Problem into Terms of Anxiety.*

The first step in treatment is to resolve the problem into terms of pure anxiety. We have already suggested that a psychoneurosis is a mode of shelving anxiety. In the hysterical and obsessional neuroses there may be little or no overt anxiety, and in this case the first step is to convert the hysteria or obsessional reaction into a straightforward anxiety reaction.

Any exploration of consciousness or of its "unconscious" fringe that succeeds in giving the individual some insight into the motives of the reaction, its original cause and its present justification, must inevitably leave him with anxiety. It was anxiety that compelled the psychoneurotic solution, and anything that deprives him of this solution must throw him back into an anxiety state.

This stage of treatment demands some form of mental exploration, perhaps no more than a simple anamnesis, or in the minority of cases a more complex "analysis". A tactful and complete sex-history will often reveal much of the trouble; too often an inability to obtain this leads to a bungled and unnecessary analysis, and a long-winded analysis may be merely an uneconomical way of conditioning a prudish patient to tolerate sex discussion. Psychiatrists with sex inhibitions and an unsystematized attitude towards sex ethics will always have difficulty in eliciting sex-histories.

In an individual who habitually reacts to difficulty with some specific

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neurotic reaction, it should not be necessary in most cases to work right back, even where that is possible, to the very first occasion, usually in infancy, when he first reacted in this particular way.

As an example we may take stammering, a neurotic symptom which cuts off one's adaptive powers at their very source. This is always primarily an anxiety symptom which may persist as an habitual anxiety response, or may in some cases be utilized for hysterical purposes. The primary occasion for anxiety has probably occurred in the third or fourth year of life, and is usually due to the child being made self-conscious about speech. There is little practical point in resuscitating the original occasion even if it is possible, and certainly it is never easy. Clinically and practically one gains more by investigating the anxiety-causing situations to which the individual is actually at the moment failing to adjust, and by teaching him a technique of dealing with his present anxiety.

As an aid to mental exploration Ferenczi's " active therapy " may be useful. By forbidding a neurotic symptom or activity an artificial anxiety is induced which may irritate the patient into " free-associating " or dreaming more freely, and into offering a fuller anamnesis which helps to extend the diagnosis.

*Finding an Adequate Outlet for Bound-up Energy.*

The second stage in treatment is to find an adequate outlet for the energy that is bound up. The most adequate outlet is of course the specific motor response of the segment under tension, which, by discharging autonomic tension, affords a complete and objective solution.

The first step in the finding of an adequate outlet is to remove the internal obstacles; to modify and eliminate wrong attitudes to one's impulses and instincts. The preliminary exploration will have cleared the way in simpler cases, perhaps will have actually achieved the removal of the internal obstacles. Even in the less simple cases the more complex exploratory technique used for such cases will have gone much of the way. A simple explanation may then permit of an effective psychological synthesis. In other cases a more sustained and detailed chain of explanations will be required.

The second step in the finding of an outlet for energy is to remove the external obstacles. This is achieved by some form of social therapy; possibly a change of job, or marital state. Whereas psychotherapy aims at directly influencing the individual's type of reaction, " socio-therapy " aims at indirectly influencing his type of reaction *via* the situation.

It is only common sense to recognize that a neurosis may be the product not only of some inferiority, but of a situation making demands which no individual need reasonably be expected to meet. In so far as the authority of the therapist is able to influence parents, mates, employers and other significant persons in the patient's environment, he may be able to influence and

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modify the neurosis. American psychiatry has rightly compelled greater attention to this aspect of psychotherapy and preventive psychiatry. Innate inferiorities must also be considered and allowed for. A man with weak sight or physique will obviously be unsuitable for certain jobs. But inferiority in one respect does not, of course, necessarily connote inferiority in another respect. Where a man attempts something he is obviously unsuited for, he is creating for himself an obstacle, and a reasonable social therapy will help him by dissuading him from what he cannot do to what he can. Sociotherapy is becoming of increasing importance, but its success is contingent on a new social outlook, and until that is attained we must depend largely on the provisional measure of stages 3 and 4.

The third step is to find a direct outlet or, *faute de mieux*, an indirect outlet.

Where a direct outlet is impossible, one attempts to reduce the general tension by indirect means. The energy diffuses into other segments and may reinforce the activity of these segments. But there is always a residual tension as long as the specific effective response is not forthcoming. In those who already have a number of residual tensions or who are specially sensitive to tension, this becomes manifest either as overt anxiety, or as a chronic tendency to become anxious with the slightest additional nocuous stimulus.

However, many of these indirect means of relieving tension may help the situation sufficiently to make life tolerable, useful and almost happy. The very best " sublimations ", as we so often call them, are those which link up the individual in some way with society ; those in which the direction of interest or libido is centrifugal rather than centripetal ; they are what Overstreet calls " expansive " rather than " contractive " reactions, and aim at mastering reality rather than evading it.

Every activity which compels one to consider other individuals or another individual is useful in this respect. Naturally, a satisfactory sexual life is the primary means of combining direct gratifications with social interests ; it is a direct outlet rather than a sublimation.

Prof. Panconcelli-Calzia, of the Phonetic Laboratories, Hamburg, and Dr. Eberhard Zwirner, Psychologist to the Kaiser-Wilhelm Institute for Brain Research in Berlin, have called my attention to an especially interesting and promising mode of therapy which professes to relieve and even cure neurotic reactions by what are primarily indirect means of relieving tension.

This is the method of Schwerdtner, a Viennese physician, who suggested it primarily as a treatment for stammering, and secondarily as a general mode of psychotherapy. Schwerdtner put forward his theory in 1926 in the *Medizinische Klinik*, No. 8, p. 293 ; but it was overlooked and neglected until Prof. Calzia drew attention to it in a valuable little paper on speech-therapy that I am including in my bibliography.

Roughly speaking, Schwerdtner's treatment consists of a training in

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" expressive " movements and in gesture. He suggests that, phylogenetically, gesture and facial " expressive " movements preceded speech; later they accompanied it and together constituted the " expressive " reactions. It is interesting to note that in this country Sir Richard Paget has suggested that speech derives from gesture, and is indeed a result of the tongue pantomiming the gestures of the hand.

In the course of development, speech developed at the expense of its predecessor—gesture. Civilization has not been favourable to the motor expressions of emotion, to gesture and facial expression. Convention has repressed the muscular expression of emotion, has mechanized muscular action and confined it increasingly to the more mechanical, practical acts of moving from place to place and of manipulating objects.

These movements contain less and less of our emotional psyche, and provide less and still less outlet for our emotional life. The result is to obstruct the natural and necessary outlets for emotional energy, and inevitably to interfere with the harmony of the personality. Inhibitions occur, natural reflexes are de-conditioned and neurotic maladjustments of every type may result. Although " expressive " movements are not in themselves adaptive movements, they do undoubtedly relieve tension. We can understand how a damming-up of them may reinforce the sum-total of conscious anxiety.

The dissociation of speech from gesture and facial expression tends to break up the total " expressive " reaction of which all three are components. Conditioned speech responses are strongly interfered with and, especially in certain individuals, innate or situational factors may decide a speech neurosis—that is to say, a psychoneurotic reaction with speech symptoms.

Inadequate " expressive " reactions may be responsible for affective disturbances of every kind, and a psychotherapy is demanded which will relieve these inhibitions. Schwerdtner suggests that the most effective psychotherapy is through movements which express emotions.

By directly translating affective states into motor responses we produce an immediate catharsis, a catharsis of the affective into the motor. Schwerdtner's therapy aims at converting affects into acts, not words or thoughts; it releases katathymic trends that can be released in no other way. Recent interest in rhythmic dancing and mime may indicate that we have somehow subconsciously realized this need of our generation.

Schwerdtner's methods seem at first somewhat impractical, but I am told that in actual practice they are not so. After exercises in balance and co-ordination which aim at training the kinæsthetic sense and at giving the patient a sense of pleasure in the movements of his body, Schwerdtner sets musical themes of progressive difficulty which the patient is expected to interpret in rhythmic movement. In translating a musical theme into a movement theme he is expected to create an interpretation of sorts. This technique obviously resembles that which Dalcroze uses for purely musical purposes. A useful



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addition might be the teaching of an alphabet of mime and gesture so simple and natural as to be easily transferable into everyday life.

The spade work of the therapy can be relegated to competent lay instructors working under medical direction. Progressively, and without self-conscious attention to the mode of therapy the patient will learn to create an outlet for his inhibited psychic energies, and to project harmlessly on the outside world his oppressive complexes. It is an abreaction, a catharsis of the affective into the motor which is more valuable than any mere catharsis into words could be.

To a certain degree sport has a similar cathartic action. Presumably this is why the Anglo-Saxon races have been able to retain an unusual sanity, despite the fact that they commit so many psychological indiscretions. Ball-room and rhythmic dancing, amateur theatricals, wrestling, singing and public speaking are some of the activities that may be prescribed for the same purpose. They are sublimations in the best sense, in that they afford gratification and overcome inferiorities at the same time. Jiu-jitsu, in my experience, is an almost ideal sublimation for men. It combines with a training in physical and mental poise, and in the ability to relax one's muscles one moment and to contract them strongly the next, the advantage of a basic confidence in one's physical self. Also it can be taken up at any age by either sex, can be practised up to an advanced age, and makes little claim on one's time.

The fourth and last step is—where necessary—to condition more permanently the adaptive activities and outlets that have been found. The mere analysis serves to canalize energy, bound up in anxiety, into adaptive activities. Where the simple adaptive canalization is not maintained, it will be necessary to condition these activities more permanently; by habit, by the tonic effect of success, and the "virtuous circle" which it establishes, and by a maintenance of the "transference" for as long as is necessary.

Incidentally a frank psychotherapy of encouragement or "moral support" need never be despised. There is no reason to fear the "transference" between patient and psychotherapist. It will be useful in every stage of the psychotherapeutic procedure, in the "exploration", in the synthesis, and especially in the reconditioning. It offers no special dangers, except where the psychotherapist himself is in need of the "transference". The need for esteem is a fundamental one, and the type of psychoneurotic who has the will to get better can always do for others what he could never do for himself. Sometimes the "moral splinting" of the hypnotic or suggestive techniques may be useful until the reconditioning has been established.

*Avoiding Stimuli that tend to Maintain Tension.*

If an adequate outlet for bound-up energy cannot be found, then the specific stimuli that tend to maintain tension and anxiety must be avoided or reduced.

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In some cases the only practical way left is to mollycoddle the patient. Some neurotics will never, under any circumstances, be able to pull their full weight in the community. Their metabolic make-up is such that they cannot undertake certain obligations which the more ordinary individual must do. They have a psyche which requires splinting. If some degree of mollycoddling will prevent their becoming a drain on the resources of the community, then it is completely justified.

One must also keep in mind that there are certain neurotics with special, rare and valuable gifts which they can only utilize for the benefit of the community when it shows them some special consideration. Only a false economy would deprive these unstable supernormals of such consideration; to do so would be to squander the intellectual resources of the community.

A second device for the reducing of nocuous stimuli is the use of drugs that raise the threshold of the central nervous system against such stimuli. Such drugs belong to the first group in Pick and Molitor's classification, namely those acting predominantly on the cortex. These can be used to raise the threshold to nocuous stimuli.

Bromides are generally considered to act in this way. Some of Pavlov's experiments suggest, however, that they act by increasing the inhibitory functions of the cortex. This has not been conclusively proved, and we will assume that they blunt the sensory pathways and reduce the number of sensory stimuli that reach the individual, among these the nocuous stimuli. A slight reduction in their number may enable an over-anxious individual to carry on who otherwise could not do so.

Sir Maurice Craig has recommended bromides in 5-gr. doses for use once a day over a period, or even for life. There has long been a prejudice against their use because of an alleged dulling effect on the mind. This is no doubt due to the popular belief that prolonged administration of the drug in epilepsy causes mental deterioration. But this deterioration is just as likely to result, as Adie suggests, from the fits, and from an insufficient dosage to completely stop the fits. In doses so small as 5 gr. the question of subsequent mental deterioration need hardly arise.

Where an anxiety state is the result and cause of a situational vicious circle which may have taken years or even a lifetime to develop, and which must take at least months to resolve, bromides in such small doses will help to diminish the anxiety of unavoidable conflict. What is lost in sensitiveness, if anything, is more than regained in stability. A successful day is the best recipe for a restful night. Where this cannot be attained, a morning dose of bromide will, by avoiding some of the petty conflicts of the day, diminish the need for an hypnotic at night.

Although bromides may help to avoid needless conflict and anxiety, they will have little or no effect once depression has set in. Bromides ward off nocuous stimuli, but cannot relax the bodily tensions induced by such stimuli.

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*Combating Unavoidable Anxiety by "Supportive" Treatment.*

In the last instance, where bound-up energy cannot be released, or nocuous stimuli avoided, it will be necessary to depress and diminish autonomic activity by chemical or physical means.

Chemically this can be done by small doses of drugs belonging to the second group in Pick and Molitor's classification: those that influence the cerebro-spinal system *via* the autonomic centres in the base of the brain. One must remember, however, that drugs of this class act on an area where vital centres are in close proximity, and a large dose may have dangerous results. One must also remember that although the action of a drug may be predominantly cortical or subthalamic, its action does tend, as the dose grows larger, to diffuse over the entire nervous system. The Viennese workers have suggested that these drugs act more effectually if combined, and that the synergistic effect of small doses of hypnotics of both types is greater than that of larger doses of drugs of one type.

Of the barbitone group, *medinal*, in 2½-gr. doses up to three times a day, can be useful in the supportive treatment of unavoidable anxiety. Sir Maurice Craig has advised daily doses of 5 gr. for neurotic, unstable or over-civilized women for some months before and after childbirth, as a preventive measure against a puerperal psychosis.

*Sandoptal* or isobutyl-allyl-barbituric acid is an especially useful member of the barbitone group. Empirically it seems to have an almost specific effect in relieving anxiety, and is said to be less toxic than other members of the group and more easily tolerated by older people. It seems almost to have the same effect on anxiety as morphine, but without its drawbacks. In some individuals it may cause vertigo. Up to the moment I have found this to be the most generally useful drug in the supportive treatment of unavoidable anxiety.

*Morphine* has a specific effect on anxiety and on the hypertension associated with neurotic symptoms, hence the danger of its use by psychopaths. This action seems hardly accounted for by its alleged pharmacology as a depressor of sensory functions of the cortex, but seems more reasonably accounted for by a depressant action on the autonomic system or on afferent autonomic terminals in the viscera themselves.

Kolb points out that much of the deterioration usually attributed to morphine is due more probably to the psychopathic process itself. In his experience many addicts have been able to adjust themselves adequately to society throughout a normal lifetime without any signs of deterioration. Whereas the psychopathic addicts tended to deteriorate, he found that the more normal addicts were often able to carry on and support themselves, to retain their employment in useful occupations and to gain and keep the respect of society. It is probable that deterioration occurring in psychopathic addicts is due to a variety of causes, partly to the psychopathic process

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itself, partly to the taking of very excessive doses from the beginning; in certain cases the addiction may have acquired an obsessional significance.

The use of morphine in melancholia has been unsuccessful. Already with the onset of a depression, irreversible mechanisms have been released which no chemical means can control. Although the use of morphine has undoubtedly helped some psychopaths to adjust, it is ordinarily too dangerous to be used for that purpose, except possibly in the hands of an unusually competent and daring psychiatrist. Moreover, the discovery of the newer and better barbiturates and allied drugs is rendering the risk an unnecessary one.

Hess has produced experimental evidence suggesting that sleep is the result of a parasympathetic or vagal reflex operating *via* the basal ganglia and inhibiting cortical activities. If so, this provides one interpretation for the action of the subthalamic group of drugs in the inducement of artificial sleep.

In Pavlovian terms, drugs of the cortical group influence RS and perhaps RP, drugs of the subthalamic group influence the RE, and both are of greatest use while anxiety is present and before irreversible mechanisms have set in.

To leave the chemical methods of reducing autonomic tension, among the simpler, often extremely useful physical methods are the following: the art of relaxing voluntary muscles, of assuming postures that are economical of energy, restful and poised, increasing the amount of sleep up to nine or eleven hours a night, the use of hot immersion baths, especially at night, the effect of a slightly relaxing or a sunnier climate, and, above all, when available, the sun. These are minor regressions that relieve tension without leaving a sense of guilt.

The art of muscular relaxation, or the art of hypotension as it has been pretentiously called, has proved useful as an auxiliary method in the treatment of stammering, which is in itself a vocal anxiety symptom. It seems reasonable to hope that it may be helpful in the treatment of other anxiety symptoms. Obviously, however, there are neurotics who require a technique of hypertension rather than one of hypotension.

Sleep has its own technique, and it is amazing how a good technique may dispense with the need for hypnotics and sedatives where anxiety is present. A good coil-spring mattress, a down pillow, sheets and blankets of sufficient width not to require tucking in, a double bed for each individual, loose night-clothes or none at all, the use of heavy rugs, screens and other anti-noise devices; considerations such as these may make all the difference in the case of a mild anxiety neurosis.

The use of alcohol to control anxiety is a device which has been used by society for a long time. Although useful as an occasional prophylactic, it can hardly be recommended to those whose anxiety is already neurotic.

Thyroid seems to increase autonomic tension, and will, in many people, precipitate a paroxysm of anxiety or even an anxiety neurosis. Rapid weight-reduction seems to have a similar effect, although a gradual weight-reduction

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will be an aid to efficiency in more normal people who have an adequate outlet for their energy and are not suffering from unusual tensions. A slight degree of obesity seems to protect against anxiety.

The relationship of diet to anxiety states is not clear. A ketogenic diet is said to diminish the excitability of the nervous system in epilepsy. On the other hand, Cameron and Osman find that nervousness and irritability in children is often due to an acidosis associated with a "glycopenia" due presumably to this very diet. As treatment they advise the ingestion of readily assimilable carbohydrate in the form of barley-sugar. A craving for sweets is common among one type of anxiety neurotic, and may be a defence-mechanism if the contention of Cameron and Osman be true. Further research into individual biochemical "constitution" will probably illuminate the role of diet in anxiety.

The "supportive" treatment of anxiety has of late years been despised and neglected, except in mental hospitals, where it has been despised but not neglected. Even here, where it is to some extent appreciated, at times even abused because of inadequate staff, a patient who has been nursed into some semblance of mental health at considerable cost to the community is too often sent into the world without a sedative to tide him over the inevitable anxiety of the chill transition stage. This is all the more necessary because social after-care, the keystone in the treatment and rehabilitation of recoverable psychotics, is at present hopelessly inadequate, and is regarded too much as a charitable bonus rather than as an integral and critical stage in the treatment. Perhaps a little "rationalization" would be useful here if we are not to be unfair both to the mental hospital and to the community.

Too often, except in children perhaps, anxiety is not immediately removable. Especially where economic and social factors are involved, the causes of anxiety persist and the only possible treatment is supportive.

## Summary and Conclusions.

The psychiatrist is concerned with four moods or affective-emotional states and their permutations and combinations.

These four moods may be considered in terms of conflict; anxiety as unsolved conflict, elation as solved conflict, depression as unsolvable conflict, apathy as the most complete solution of conflict.

Conflict may be considered in terms of the tensions interacting to cause conflict and the balance between such tensions. In anxiety the tension is a rising one, in elation it is a falling one, in apathy it is low and is continuously being discharged, in depression it is extremely and continuously high and amounts to a sort of spasm.

In this paper it is suggested that in our present state of knowledge these tensions may reasonably and profitably, if somewhat speculatively, be considered to be metabolic, visceral and autonomic tensions.

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The interpretation of anxiety as an energic problem, due to metabolic, visceral and endocrine hypertensions, leads us to formulate a plan of treatment in general terms :

(1) The problem at hand must be resolved clearly into terms of anxiety. This may be very simple, or may require the full resources of the psycho-analytic technique.

(2) An adequate outlet, not conflicting with social demands, must be found for the energy that is bound up in the anxiety ; that is to say for the segment or instinctive activity under greatest tension.

(3) Failing this, the individual must be " cotton-woolled " and spared anxiety-producing and tension-increasing stimuli.

(4) As a last resource, " supportive " treatment must be used to combat anxiety which is completely unavoidable ; this, by diminishing the total energy of the individual, relieves the painful hypertension of individual segments or viscera.

Of the four steps in treatment, the last two are far from ideal, but, under present conditions, often enough the only methods available. In any case, it is unwise to despise or neglect anything that may help to diminish the particular form of anxiety and conflict that is doomed to lead nowhere ; for the problem of anxiety is after all the problem of unhappiness.

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