has been emphasized by Flescher (8). This is the discharge of tension involved, for example, as in the convulsion itself in EST. The periodic discharge of tension, which itself is largely the result of frustration and rage, leaves the patient often more composed and accessible. This would not persist long—the tension would, of course, build up again rapidly—were it not for the mobilization of defenses and stimulation of ego-organization which results from exposure to shock therapy.

PART II—THE ATTITUDES OF SHOCK THERAPISTS

Modern trends of thought regard all physician-patient relationships as worthy of study, but it is in psychiatry that emphasis on the interpersonal relationship has assumed greatest importance. In any dynamic psychotherapeutic relationship there must be awareness of countertransference on the part of the therapist. Feelings and defenses of the therapist which may interfere with the treatment process require recognition and clarification for their control or deletion. Unfortunately, there has been inadequate consideration of this factor in all the physical methods of therapy including the shock therapies and the use of modern "wonder drugs". A fuller understanding of this aspect of the physical therapies may enable them to be used more effectively. In addition we may gain further clues concerning the controversy question of the mode of action of these therapies.

Fenichel (6) states that, in personal experience in analyzing doctors who apply shock treatment, "The (conscious or unconscious) attitude of the doctors toward the treatment was regularly that of 'killing and bringing alive again,' which idea, of course, provoked different emotions in different personalities. It may be that the impression the treatment gives to the doctors corresponds to an impression it gives to the patients. It seems that they, too, experience a kind of death and rebirth."

Wayne (18) has recently drawn attention to the fact that the characteristics of a method of treatment can unconsciously evoke responses in a doctor which may be obscure to him. The use or avoidance of the method itself may be motivated, at least in part, by these same obscure responses. He lists the characteristics of electroconvulsive therapy (EST), pointing out how the unconsciousness, seizure and coma show all the characteristics of an overwhelming assault. Wayne then discusses the unconscious constellations which may inaugurate a decision to use EST or lead to an emotionally toned prejudice against its use. He cites the case of a physician who suffered back pain on the days he had administered EST. Analysis revealed guilt over unconscious hostility toward the sick patients.

We realize the potential pitfalls were we merely to question shock therapists concerning their feelings. Another approach, therefore, is to consider the statements made by psychiatric colleagues in their "off guard" moments. Psychiatrists discussing shock therapies with relatives of patients are often very guarded in their remarks. Even though they are usually very frank about the possible physical effects of this treatment, one feels that they are carefully weighing their words concerning the psychological implications. In marked contrast are the casual, often lighthearted comments of the shock therapist before his professional colleagues. Remarks made at such times will tend more nearly to reflect feelings and attitudes of the shock therapist than might be obtained by any other method short of psychoanalysis. One of us (J. A. E.) has collected these statements over a period of eight years in Britain and the United States. Most of them have been heard on many occasions. Colleagues who have seen the list of comments have confirmed our findings that many affect-laden colloquialisms are regularly used by shock therapists in referring to their therapy. Undoubtedly the following list could be lengthened, but only personally collected remarks are used, and only remarks uttered by experienced shock therapists who would seem to have had time enough to develop fairly consistent attitudes. The feelings of the resident in psychiatry are, we believe, often quite confused when he first becomes involved with shock therapy. The statements listed were made by 19 shock therapists out of a possible total of 25. Numbers 1 through 8 and 12 and 14 were heard (with minor variations) from three or more therapists on independent occasions. Numbers 10, 11 and 13 were heard twice each.

It is important to point out that many shock therapists (including some of those whose re
marks are cited below) have denied any particular feeling about shock therapy when directly questioned. Even the suggestion that statements such as “Hit him with all we’ve got” are not used without significance is met with strong protests from some therapists. Thus, it seems very probable to us that the insistence of some workers upon exclusively physical explanations represents a defense against unacceptable unconscious feelings.

**Statements of shock therapists in U.S. and Britain**

1. “Let’s give him the works.”
2. “Hit him with all we’ve got.”
3. “Why don’t you throw the book at him?”
4. “Knock him out with EST”
5. “Let’s see if a few shocks will knock him out of it.”
6. “Why don’t you put him on the assembly line?” (This comment has been heard in a hospital where the assembly line technique was indeed used to cope with large numbers of patients on shock therapy. The implied lack of awareness of any interpersonal relationship between therapist and patient is very obvious.)
7. “If he wouldn’t get better with one course, give him a double-sized course now.”
8. “The patient was noisy and resistive so I put him on intensive EST three times a day.”

Recently one of us was consulted by the husband of a woman alcoholic as he had been advised by a psychiatrist to let her have EST. The psychiatrist had explained the procedure to the husband and had given his opinion that it would prove beneficial to the patient by virtue of its effect as “A mental spanking.”

10. “I’m going to gas him.”
11. “Why don’t you give him the gas?”
12. “I spend my entire mornings looking after the insulin therapy patients.”
13. “I take my insulin therapy patients to the doors of death, and when they are knocking on the doors, I snatch them back.”
14. “She’s too nice a patient for us to give her EST.”

The first 9 of the above statements were made about EST. Clearly, the main attitudes expressed are those of hostility and punishment. In marked contrast are the remarks about insulin therapy. Here we observe that the idea of a threat is overshadowed by the concept of rescue of the patient from destruction. Number 13 above refers to the theme of death and rebirth, with the therapist more emphatically in the role of the “good” figure who saves the patient’s life. Statements such as number 14 are usually spoken in jest, but behind the words used we can detect the therapist’s reaction against the sadistic implication of shock therapy.

Our experience in the observation of CO₂ therapy has been limited, but here again in remarks numbers 10 and 11 we may suspect a hostile, punishing attitude. CO₂ therapy has been in use for much less time than EST, and possibly the use of colloquial terms to represent CO₂ will yet develop. More often we have heard therapists refer to CO₂ therapy in terms of assumed action, e.g., “Let’s give her CO₂ to help her express her hostility.” It is not our intention to discuss the possible pharmacological action of CO₂. However, we have observed equally violent abreacts following experimental work with nitrogen inhalations in psychiatric patients. The lack of a full amnesia in association with the gassing or choking “attack” of the therapist might well provoke expression of hostility in the patient irrespective of any physiological effect of the gas used. In observing CO₂ therapy, it has seemed that the least excited and aggressive reactions occur in depressed patients who appeared to “take their punishment lying down.”

While many workers with CO₂ therapy have tended to study only the pharmacological effects of the gas, the psychological meaning of its use was investigated by Hargrove et al. (12). They concluded (in part), “The use of carbon dioxide therapy in our hands added no specific therapeutic effect but did add problems of transference and resistance that retarded or prevented therapy.” These findings were confirmed by Freedman (9) who concluded that the reactions of each patient followed the transference reactions to the therapist administering the treatment. He noted also that in the CO₂ treatment situation there seemed to be intensification of the transference reactions even on relatively brief contact between therapist and patient.

There is another situation in shock therapy which, though frequent, has received little atten-
tion. In certain clinics and state hospitals where large numbers of patients are treated, the shock therapist may be a stranger to the patient. While it may be desirable for the psychiatrist to be present at the somatic treatment of his patient, this is not always possible. Here then we have a situation which is worthy of investigation. There is a need for studies to compare and contrast the results, and the transference and countertransference reactions, in various somatic therapies given by the patient’s own therapist on the one hand and by a strange shock therapist on the other. Of course, the patient’s therapist is the responsible decision maker, and he may seem to be the punisher by proxy in some instances; however, it has happened at times that the transference reactions of the patient to the two therapists have differed.

Nurses and attendants are not only auxiliaries of the shock therapist in the actual shock treatment session, but are more intimately and continuously in contact with the patient. Scrutiny of the reactions of nurses and attendants to their participation in somatic therapies should also be rewarding, but spontaneous “off-guard” expressions have not been sufficiently available to us. It is, of course, the frequent experience of a physician in a state hospital to be approached by a nurse who suggests a “few shocks” for a patient because he has been fighting, resistive, uncooperative or even merely obscene in his talk. In one hospital which employed a large number of relatively untrained personnel, it was clear that such members of the staff used EST as a threat. Even non-psychotic voluntary patients reported threats of “You will go on the shock list” for such lack of cooperation as disinclination to eat a full meal! Certainly such openly threatening remarks are usually confined to the least understanding and most junior attendants who are enjoying a newfound sense of power. This is sometimes connected with an unconscious participation in the “omnipotence” of the shock therapist.

**Discussion**

The most interesting feature about the remarks listed is that all those which display hostile or punishment attitudes refer to the briefer forms of therapy. These, of course, are dramatic therapies and involve much action. They also bring the therapist into a much shorter contact with the patient.

In marked contrast are the prolonged care, and watching over the patient during many hours of insulin therapy.

Electroshock and insulin therapy actually engender different attitudes in the therapist by virtue of the mechanisms and techniques involved. In the case of the latter there is prolonged display of the “tender loving care” about which Abse has written (19).

In talking about the hostile, attacking nature of EST with shock-therapists, we have noticed that some assume they are being accused of sadistic intentions. Such is far from the case. Instead, we wish to stress again that the very nature of the treatment itself can produce the attitudes described.

The success of EST, principally in depressions is thus associated with hostile or punishing attitudes on the part of the therapist which correspond with the impressions received by the patients. It seems probable therefore that even the most organically minded shock therapist unconsciously allies himself with the punitive super-ego of the depressed patient.

In insulin therapy, we can be sure that the schizophrenic’s well-known sensitivity to the attitudes of others makes him aware of the element of tender loving care to which the treatment lends itself:

A statement uttered by Freud in 1904 (19) is worth repeating here: “All physicians, therefore, yourselves included, are continually practising psychotherapy, even when you have no intention of doing so and are not aware of it; it is disadvantageous, however, to leave entirely in the hands of the patient what the mental factor in your treatment of him shall be. In this way it is uncontrollable; it can neither be measured nor intensified. Is it not then a justifiable endeavor on the part of a physician to seek to control this factor, to use it with a purpose, and to direct and strengthen it?”

This is a suitable place to suggest our need also to examine the psychological implications of the latest type of somatic therapy—the use of the drugs called tranquilizing agents. Undoubtedly these drugs have turned attention and interest toward the chronic psychiatric patient. Many thousands of “back ward” patients in state hospitals can now feel that
"something is being done." In many instances these patients are being observed as never before. The enthusiastic drug therapist looks for signs of improvement in his patients and, in so doing, offers an interpersonal relationship that has often been lacking. Nurses and physicians react in a more positive and loving way towards the "tranquilized" patient. These and many other such factors must be kept in mind because we cannot investigate such therapeutic tools from a purely pharmacological viewpoint.

The whole question of countertransference in medicine generally has been considered by Lewin (15). The medical student's first "patient" is a cadaver. "His relationship to the cadaver is an outlet for many sublimated, active, libidinal drives, as well as those of mastery and power. Intended to be a prototype of all future patients in certain rational respects, the cadaver easily comes to be the student's ideal of a patient in all respects." Lewin goes on to point out the unconscious knowledge of doctors that sick people are aggressive, either to the environment or to themselves. Counter-aggression on the part of the doctor has to be sublimated. For example, the doctor will use drugs which would be poisonous in non-therapeutic doses; he may use morphine for a severe pain and thus reduce his patient to the state of a cadaver. Occasionally in years gone by, we have seen or heard of whole wards of chronic psychiatric patients being kept relatively orderly and subdued by the use of the older sedatives. Such occurrences can be understood in terms of Lewin's interpretations. It seems clear that such excessive medication is the end result of countertransference feelings in the nurses and physicians.

Lewin's original paper deserves study by all psychiatrists who are using the latest drugs which have, as yet, none of the unfortunate associations of the older sedatives such as suicides and addictions. While, we investigate these drugs from pharmacological, physiological and psychological points of view, we would do well also to elucidate countertransference meanings.

Demands from relatives of patients are well known to psychiatrists in relation to shock therapies as well as to the new drugs. A study of the unconscious attitudes of relatives of shocked patients might well be revealing.

Meanwhile, many of us will agree with Arieti (3) when he says, "The drastic nature of shock treatment often acts as a catalyst on the emotional attitude of the relatives toward the patient."

SUMMARY

The mode of action of the somatic therapies can be investigated from the psychological viewpoint as well as approached through physiological studies. Psychological studies seem to be most useful when unconscious transference and countertransference reactions in the physician-patient relationship are scrutinized.

Prolonged intensive psychotherapy with patients who have had shock therapy shows that unconscious defensive reactions were aroused vis-a-vis the shock therapist and his assistants at the time of treatment. It is upon the arousal of such defenses as well as the support the patient feels in the total treatment configuration that the efficacy of shock therapy largely depends. It is important to realize that there are crucial psychodynamic events involved in the organic therapy of a functional psychosis; these need further elucidation through research in the psychotherapeutic process. This conclusion reached through study of patients previously treated by shock methods may well also apply to those treated by drugs.

Concerning the countertransference aspects, it is concluded that the briefer therapies lend themselves to the development of hostile, punitive attitudes, whereas a therapy such as insulin therapy engenders a more loving and caring attitude on the part of the therapist. These attitudes are displayed in the casual "off-guard" remarks made by shock therapists; some examples of which are listed. It is emphasized that there is as great a need for awareness of countertransference in the physical therapies as in psychotherapy. This awareness should lead to fuller understanding of the psychological implications of these therapies and to their more effective use.

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