Numane Techniques in Electroconvulsive Therapy

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THE purpose of this paper is to show that the use of certain techniques in electroconvulsive therapy render it not only safer, but lessen the unpleasant and frightening aspects to the patient and are, therefore, more humane. Since its beginning in this country, electroconvulsive therapy has become popular in the treatment of certain types of psychiatric disorders. For years the treatment carried a fairly low mortality rate, but a significantly high rate of physical complications. As its use increased, so did the frightening aspects of the actual treatment experience in the mind of the lay public. The latter was not without foundation. To the patient and even to some psychiatrists, the treatment was indeed a frightening and an emotionally traumatic experience. To the patient, receiving electric current while awake was envisioned as a horrible experience in spite of the physician's repeated assurance that no electric current would be felt. In addition, certain necessary measures in preparing the fully conscious patient for therapy further enhanced the already rapidly mounting anxiety. The insertion of an uncomfortable mouth gag, the application of electrodes to the temples and the forceable restraint by straps or personnel were extremely upsetting. Specially designed arched treatment tables, or sand bags placed under the patient's back, to lessen the chances of compression fracture of the vertebrae may have given the psychiatrist some small feeling of security, but only increased the patient's physical discomfort and anxiety.

As a result of this crude and frightening experience, many patients often refused to return for treatment or, if they did return, frequently terminated it prematurely. Most of them experienced painful uneasiness of mind about undergoing another electroconvulsive treatment.

## A Humane Technique

A technique devised to render electroconvulsive therapy as safe as possible and the entire procedure relatively free of disturbing emotional factors is carried out as follows:

1. The treatment is explained briefly to the patient, and his questions answered in a simple manner. He is assured that he will be unconscious prior to the application of the electric

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current. He is given sedation in the form of meprobamate or sodium amytal along with atropine one hour prior to treatment. The same sedation can be used both for outpatients and inpatients, but meprobamate is preferred for outpatients.

- 2. The patient is treated on a regular hospital carriage, treatment table, or regular hospital bed. There is no need to hyperextend the spine. Care is taken to avoid wheeling a recently treated, unconscious patient in front of a conscious patient awaiting treatment.
- 3. A soft cotton roll is used as a mouth gag, and is inserted just prior to the injection of thiopental sodium. If the patient objects to the mouth gag, it can be inserted while he is unconscious, just before the current is applied. By utilizing thiopental sodium and succinylcholine, there is no difficulty in its insertion as the entire musculoskeletal system is relaxed. With this technique there is no need to remove the patient's dentures if they fit adequately (a request to which many female patients object).
- 4. The electrodes are not applied until the patient is unconscious. No physical restraint is needed except light holding of the patient's hands during the convulsion, by the nurse or the doctor.
- 5. A trained anesthetist or an anesthesiologist is employed who utilizes a small (22 gauge) needle to inject 4 to 10 cc. of 2½ per cent thiopental sodium. At this point the personnel try to distract the patient's attention with pleasant conversation so that the discomfort from the vena puncture will be lessened.
- 6. After the thiopental sodium has been injected, the needle is left in the vein, and the syringe replaced with one containing 10 to 100 mg. of succinylcholine (depending on the patient's needs). The latter is injected rapidly and, 30 seconds after the muscle fasciculations have ceased, the electric current is applied. The

result is a very soft convulsion which, at times, is almost imperceptible.

- 7. Positive pressure oxygen or room air is maintained by the anesthetist until normal respiration has returned. Apnea due to thiopental sodium or succinylcholine is no problem when positive pressure respiration is maintained.
- 8. When the outpatient recovers consciousness, coffee or fruit juice is given him. He remains in the hospital outpatient department until he is recovered sufficiently to return home. This usually requires approximately one hour. The inpatient receives breakfast immediately upon arousing.
- 9. Postconvulsion headache is treated by 10 grains of aspirin. Nausea and vomiting (vestibular in origin) are rare but if they do occur, are treated by Merazine 50 mg. intramuscularly or by rectal suppository; if their occurrence is predicted, a 50 mg. tablet of Merazine may be given one hour prior to treatment.

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10. All treatments are given in the outpatient department of a general hospital.

By utilizing the knowledge and skill of a trained anesthetist or an anesthesiologist, there is assurance that adequate respiration is maintained. If vomiting should occur while the patient is unconscious, a suction apparatus is always available to handle the complication.

More than 2500 patients have been treated by this method, with no deaths nor physical complications. Patients with poor cardiac status, advanced age, and recent fracture have been treated with ease. Only one case of postconvulsion excitement has been seen, and this was of a brief duration. With this technique, minimal anxiety over taking electroshock therapy is the rule rather than the exception.

The services of an anesthetist increase the cost to the patient by only an approximate 20 per cent. So far, there have been no objections to the increase. Doubtless the patient and his family realize that it provides for a safer and more pleasant treatment.

## To Encourage Giving

TAXATION is ageless, has existed in some guise since man began a tribal or communal life and has almost eventually been so abused by monarchies, councils, socializers, parliaments and our own Congress as to interfere with the welfare of the State. The latter is quite the reverse of the reason given by our tax collectors and tax spenders to justify our currently high, disabling and confiscatory tax structure—namely, it is supposedly for the welfare of the State.

Historically, the excuses given for high taxes and their ultimate effect have always followed a similar pattern, the result being a police state which with us is carried on under the guise of the internal revenue bureau. The next stage inevitably develops into national demoralization as so well illustrated by Gibbon in the Decline and Fall of the Roman Empire.

The names given to some of the dubious projects which governments utilize to gain more power over their subjects (citizens) by more taxation and more spending and increasing national debt, varies with the times.

By and large the government says it is wiser and better able to spend the people's money for their social welfare than are the people themselves. So we now find our Federal Government involving itself more and more, to mention only two, in the fields of education and biologic research, the latter in no way related to epidemic or communicable disease which is the recognized province of the USPHS.

These are disciplines where, as in many others, the Federal politicians have no business, no facility and no competence. But they do offer great opportunities for more spending and, of course, more taxes since each politician has his own bleeding heart project which he must use to insure his reelection.—Northwest Medicine.