OCCUPATIONAL THERAPY AS APPLIED TO SURGICAL CASES

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In approaching this subject one must definitely define the application of occupational therapy as being either therapeutic or commercial in its purpose. If we make the therapeutic secondary to the value of the product produced, in the writer's opinion, we miss entirely the basic principle of occupational therapy and will fail utterly in the moral support of the medical profession.

There is at the present time a growing tendency among certain supporters to encourage and in certain instances to demand a product which will be of commercial value. This has been the outgrowth of a desire on the part of a worker to obtain suitable funds for maintaining a shop and a reactionary interest on the part of a patient who has tasted the financial return from his efforts.

It must be thoroughly understood that occupational therapy does not embody the principles seen in our welfare organization. It may be charitable in the spirit of its application in so far as it helps to restore the patient to bodily health, but not in the sense of offering a means for financial help only as incidental to the primary issue at stake. Therefore, strictly speaking when we consider prescribing occupational therapy for surgical cases, we must have a clear conception as to just how far in our classification of patients we are justified in going and still remain true to the accepted definition of occupational therapy.

For illustration, there is a wide field of activity ranging from the convalescent from an acute abdominal operation to the chronic incurable arthritic cripple who may have been the victim of many operations. Does occupational therapy cease to func-

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tion as such the minute the patient ceases to receive benefit or show progress in its application, or can occupational therapy be applied and still remain true to its definition to those chronic incurable surgical cases where its expression merely serves to occupy the time of the patient and the chief motive being production of something of commercial value?

A very low grade of mentality is quick and eager to accept any form of treatment which may in any way improve their physical condition. One has only to circulate about our hospital wards where occupational therapy is in active operation to determine that it is not only the intelligent patient who accepts occupational therapy as a means for restoring function, but the uneducated foreigner will accept this if it is intelligently applied by properly selecting the craft or art suited to his individual case.

If we are to be accepted as contributing something worth while by the medical profession as a whole, and it is the writer's opinion that the future success, in fact our very existence, depends upon the backing of the medical profession, we must be scientific in our definition, scope, application and results.

Surgery is an art, also it is a very definite branch of medical science as a whole. It has advanced probably more than any other department. It is extremely loath to accept anything which does not savor of truth and fact. The tendency of the day is to simplify as much as possible our hospital technique in so far as it is consistent with efficiency. That is why the medical profession do not accept new ideas until they have been sufficiently analyzed to meet with the approval of the high standards on which it is practiced today.

Although we today as a body may feel clear in our own minds as to the true definition of occupational therapy, its limitations and application to hospital work, the writer feels that we have not imparted that knowledge in an intelligent manner to the medical profession. It is true that a fair percentage, which I believe to be too widely scattered, are warm supporters. First, we should make the following statement almost an axiom: Occupational therapy should never be applied without the prescription of the doctor in charge of that case. Obviously, if we
are to consider occupational therapy as an adjunct to medical treatment, it must fall in the classification of all remedies administered to that patient. This has been brought very forcibly to my attention in the practical work done by the aides in the Boston School of Occupational Therapy. Many of the aides have been unable to get this prescription owing to the fact that the doctors take no interest in its application, probably, in many instances because they do not know even what it is.

Second, the aide should be given a résumé of the history of the case which she is to treat. If we have properly standardized the education of the aide in our schools and sent her out with the conviction that she is properly educated to practice occupational therapy, how is she to apply intelligently this treatment without the aforesaid knowledge?

Third, a record of all the work done on any individual patient should become an integral part of that patient’s hospital record. All other therapy applied to this patient is recorded, therefore, why, if occupational therapy is to be of value should it not appear with the rest of the treatment?

Fourth, the acceptance or declination of a patient as a suitable case for occupational therapy should be left to the jurisdiction of the aide. Our school curriculum emphasizes this fact and if our aides are properly educated they should be competent to pass judgment.

There is always a certain percentage of cases under treatment in any community that either border on, or are actually in the class of incurables. These cases have tested the ingenuity and resourcefulness of the medical profession and they are prone to accept eagerly any means of therapy which holds out the slightest hope of relieving them of their burden. If we are not extremely careful, occupational therapy is bound to be the recipient of this class.

We must, therefore, have the courage of our convictions and accept for treatment only those cases whom we believe conscientiously can be helped therapeutically by the application of some particular art or craft. Otherwise, we will contribute to the menace and substantiate the criticism which is so rife at present time, namely that occupational therapy is merely an amusement.
As the writer has previously stated in a former paper that the occupational therapy aide is a foreign element in the hospital curriculum, in order that she may establish herself as a necessary welcome part of that hospital technique she must show results that contribute toward the definite improvement of that patient.

A class of surgical cases which affords a fertile field for the application of occupational therapy is the industrially injured. The psychology of this type of case is most interesting as most of them fall under the workmen's compensation act. We have on the one hand the insurance company, who is willing to go to almost any expense to get this man back on the job, the patient injured, unable to work and receiving compensation which may or may not be sufficient to supply his needs and the industrial accident board who stand ready to pass judgment as to the incapacity or ability to work.

Practically all of these cases present to a greater or less degree impaired function of either body or limb and, therefore, are classified as surgical. Into this class fall fractures, traumatic injuries to arms and legs, necessitating many times amputations, and injuries to back and head. Many of these injuries are so slight that by all the known methods of examinations by the surgeon no evidence of real incapacity can be determined. We do not do these patients the injustice of saying they are faking, but we do feel that if they made an effort to go back to work that they would suffer very little discomfort. A second class are those where we have a real definite injury which does incapacitate the man for doing his original work. A third class includes the individual over fifty who has labored hard all his life, honest and conscientious. He receives an injury which although not severe is sufficient to keep him from work for a period of three to four weeks. His muscles accustomed to daily activity cease to function and in short lose their tone and he is honest in his contention that he is not able to go back on the job.

In the first class of unwilling worker the writer took a series of cases with a so-called wrenched back where no definite injury by either physical examination or X-ray could be determined. These patients were put upon a rug loom with a back to the seat,
which was so inclined that the patient in order to get support was obliged to stop his work. Careful records were kept as to the number of times he rested and the actual number of hours he worked in stooping and reaching in his rug weaving. The products of their work were presented to them. In a series of ten cases not one individual case went longer than a period of one week using periods of rest working two to three hours on a stretch. In short, we were able to demonstrate to our own satisfaction that these patients were able to sit on a bench without a back for three hours using their back muscles without restraint and as far as any physical disability in our opinion was concerned, were able to return to work. Obviously, the conclusion to be drawn is that these men in the interest of their work forgot the incapacity they thought they possessed.

The second class of ten cases were real injuries, comprising fractures of the wrist, cut tendons of the hand, fractures of the ankle, fractures of the spine and contractures about the joint which has been injured. Clay modelling to increase the function of the flexors of the fingers; basketry to restore supination and pronation in the forearm; a specially adjusted foot pedal on a jig saw to increase varus and valgus at the ankle joint; a wall loom which was elevated from day to day to increase abduction and extension at the shoulder joint; a rug loom to increase the muscle tone in back muscles were given these patients. Daily records were kept of these cases and machines improvised for measuring the increase of motion about the joints and results were recorded. In every case after a period of two weeks had passed without improvement this case was discharged on the basis that we had accomplished all that could be done by occupational therapy. Suffice to say that about one-half of this series were so improved at the end of their treatment that they were able to go back to their former work. The remainder were relegated to lighter jobs.

The third class was a series of back cases where pain, limitation of motion and inability to perform hard work were the three factors to be overcome. This is the most trying and perplexing type of case with which we have to deal. The hard labouring
man of fifty and over in the majority of cases possesses arteriosclerosis and arthritis to a varying degree and to restore function and muscle tone to this type of individual sufficient to relieve symptoms is a problem. It was found advisable to supply arts and crafts standing or sitting at a table, which did not require much flexion of the spine and to cut the working periods short with frequent intervals of rest. The majority of these cases were not able to return to their former work, although they were kept at occupational therapy for a number of weeks.

The results in industrial cases are more or less tempered by the opinion of the board. Although we may demonstrate that an individual by occupational therapy has the ability to perform certain arts and crafts, if he still states that he has pain on motion of the injured part nobody can contradict him whether it be real or false and he is entitled to leniency.

When we consider the fact that if every man injured in the State of Massachusetts returns to work one day earlier it is a saving of $150,000 a year, one can readily see the importance of any form of treatment which could help bring this about.

This work has proved of very distinct value to head injuries where no real paralysis existed but a disinclination to return to work through lack of confidence in themselves existed. The bed ridden surgical case, other than bone and joint injuries are difficult to draw any conclusion from because their stay in the hospital is comparatively short. A patient convalescing from an abdominal operation is usually too weak and is little interested in anything that pertains to work until he reaches the stage of sitting in a chair.

It would seem to me that most of the so-called surgical cases to which occupational therapy would be applicable fall under the specialty of orthopedic surgery. Naturally, of course, fractures are gradually being turned over into this specialty inasmuch as the end, function seems to be the goal to be obtained.

In taking up the problem of restoration of function, one has to consider several factors. First, the attitude of the patient towards the treatment; second, the amount of discomfort which
any treatment produces to the patient; third, keeping the patient interested in a form of treatment which may be rather slow in its expression of improvement.

Fractures, by virtue of their pathology necessitate absolute rest as a fundamental principle of treatment. This rest in turn brings about muscle atrophy, adhesions at the site of fracture with the resulting disability of impaired function in that limb. It seems to me that occupational therapy in this class of case has a very fertile field in which to express itself. The selection of the art or craft is a thing which must of necessity be left to the aide. The amount of work which the patient may safely do is governed more or less by the presence or absence of pain or discomfort to the individual. If a certain activity in performing an art or craft produces acute pain, in my opinion, it should be stopped because if the pain is sufficient to be in evidence to the patient, even with the interest of performing the art or craft, then it must of necessity be injurious.

In fracture of the forearm, the most difficult motion to restore is that of supination and pronation, that manifested by the so-called screw-driver movement. This has proven to be a great obstacle to the masseuse or physiotherapist. It seems to me that the weaving of baskets or any motion which can reproduce this twisting motion of the forearm in the performance of any art or craft is of inestimable value in these cases.

The impairment of function at the shoulder joint, chiefly of rotation and abduction, are the residual disabilities following fractures in that region. This brings into use the abductors of the arm and the elevators of the shoulder girdle, but chiefly the deltoid muscle. Any art or craft in which this muscle performs to meet function is applicable in these cases.

Another class of case is the surgical tuberculosis of the spine, where it is necessary oftentimes to leave our patient in recumbency for a period of months. All injuries to the spine fall into this class. Here, we must of necessity by the inactivity of the individual get atrophy of all the muscles, not only of the trunk but also of the arms and legs. The very character of the treatment will not demand the use of any group of muscles except those of the
arms and shoulders so that any type of hand loom may be used for certain periods, that period being entirely determined by the presence or absence of temperature. In the case of tuberculosis, or any other cases in which the patient suffers from disability where temperature is a very important symptom, the patient should not work when temperature is present.

Fractures and disabilities of the lower leg can only be treated by occupational therapy after the patient becomes a convalescent in a chair or about the ward, where foot pedal work can be applied.

Our aides must realize the distinct difference between adhesions and ankylosis of any joint; ankylosed joints are permanent disabilities and no hope of increased motion can be held out through the agency of occupational therapy, whereas adhesions are simply pathology in the joint limiting the motion to that joint surface. It is possible to stretch these adhesions to increase the range of motion through the use of arts and crafts, which will bring into action the muscles controlling the motion of these joints.

It has been the writer's experience to have seen aides working assiduously on an ankylosed joint. Many times this is not the fault of the aide but the fault of the individual who turns this case over to her. This illustrates the point heretofore brought forward that the aide should have a complete diagnosis handed to her with a résumé of the case. Aides should be furnished means and methods for measuring the range of motion from day to day in any particular joint which has been given to them to treat. When a point is reached where improvement ceases the aide should be given the authority to turn this case back to the doctor in charge with her report. In many injuries about joints the adhesions are so tough and resistent that it is only by surgical measures that they can be relieved or put into a condition where occupational therapy may be re-applied to act as an adjunct to the surgical treatment.

In summing up the type of surgical cases to which occupational therapy is applicable, I think we may say that a case which, as a result of disease or injury, shows impaired function and which has had good surgical treatment and in which the medical man feels possibility of further improvement by increase of muscle tone,
and increase or range of motion, it may safely fall into the hands of an occupational therapy aide.

If, on the other hand, a case of impaired function is a permanent disability where no hope of improvement can be held out by the surgeon, then this case falls into the classification for vocational training and is to be taught a trade.

The writer feels that the time has come when we, as an occupational therapy association, who are attempting to establish certain standards for this work should definitely define the scope and range of its function. We should have the courage of our convictions to be willing to state without hesitation that such a case cannot be helped by occupational therapy. At the present time there is a enthusiasm manifest which is liable to lead us into serious pitfalls in that we are attempting to apply occupational therapy to cases in which it can under no circumstances have any therapeutic value and it is being accepted eagerly by this type of individual as a means of a financial gain.

At present in the medical profession we are conducting a campaign on end results. We have established a follow-up system in all the hospitals having patients after operation report at periods of six months and very careful notes rendered on the record. You can readily see by this that the instincts of the medical man of the present day is to show results in any work he may apply to any given case. If the basic principle of occupational therapy is to be of therapeutic value to the patient, we must be able in terms of increased function to show without any question of doubt in the medical man’s mind results which will meet with his approval of this work. Results do not mean a high standard of excellence in the goods produced because we can manufacture machines that will do this work and do it better than we can do it by hand. Therefore, in my opinion, the slogan of occupational therapy for the future should be—apply occupational therapy to only those cases where increased function is to be obtained by its application—and cease this work just as soon as the individual has ceased to improve.

After all the one thought in our mind is the ultimate cure of our patient. We hear so much in medicine of the instruments of
precision used in diagnosis and treatment. These instruments are no more perfect than the individual who manipulates them, and their value many times is very much overestimated by the individuals who are interested in their success. The value we place upon them is based entirely upon the actual results they give us in contributing to the patient's recovery and so it is with occupational therapy. Its results are reckoned in terms of benefit to the patient and not in a store full of goods which are to bring financial returns to the patient.

The writer again emphasizes the fact that if we are to assume a position in the routine of treatment of a medical or surgical patient, in order to justify that position in the eyes of the medical profession, we must demonstrate to them results based upon a therapeutic basis.