THE CONSTRUCTIVE RESEARCH FOUNDATION, incorporated in the State of New York, is a non-profit medical research organization created for the purpose of investigating and developing processes in tissue therapy with emphasis on interaction with hormones, antibiotics, vitamins, and enzymes. In its work, the Foundation is chiefly concerned with the use of cellular material which has been completely solubilized for tissue therapy.

Tissue therapy is a relatively modern development in medicine, concerned with replacing tissue and cellular materials which the human body cannot regenerate, or is only partially able to generate, due to disease or malfunction.

The first noted research in tissue therapy was conducted in the middle of the 19th century by the French physiologist, Dr. Charles Edouard Brown-Séquard, who used aqueous extracts of glands orally as well as by injection to replace human glandular function. Further significant advances were made by the Russian physician, Dr. V. P. Filatov, at the beginning of the 20th century. Dr. Filatov used implantation of placenta tissue for regenerative purposes, particularly for the treatment of degenerative disease of the eye.²

The Filatov method has been tested in this country and proven partially

successful. In New York Eye and Ear Infirmary, for example, favorable results were obtained in the treatment of eye disease, using similar small placenta implants.³

During the past forty to fifty years, widespread interest in tissue or cellular therapy has been evidenced by physicians and medical researchers, primarily in Europe. In recent years, considerable attention has been focused on the progress and developments accomplished by the noted Swiss physician, Dr. Paul Niehans.

Dr. Niehans advanced the theory that if one injects healthy cells of a specific organ from a freshly slaughtered animal into a human organism, these cells will replace diseased cells, revitalizing the organism. There have been innumerable successful demonstrations of his theory. Application, however, has been extremely limited because it involves rapid transfer of the cellular material from animal to patient, as well as individual preparation of the material before each injection. Furthermore, until recently there were very few cellular extracts and no solubilized solutions, thereby restricting any general usage or progress in the investigation of tissue therapy.

Dr. Max Jacobson, Research Director of the Constructive Research Foundation, and his associates have been working to overcome some of the major problems encountered by Niehans and other investigators. As a direct result of the Foundation's work, stable, solubilized cellular materials have been standardized and can be made readily available to physicians everywhere.

A considerable number of solubilized organic materials developed by the Foundation are now under clinical investigation including aqueous solutions of progesterone, testosterone, cortisone, pancreas, liver, kidney, suprarenal gland, marrow, spleen, heart, and numerous combinations of these and other solubilized organic materials.

The use of these solubilized materials in the treatment of geriatric conditions as well as other degenerative diseases in the human body illuminates their importance to tissue therapy. For example, investigation by the Constructive Research Foundation has resulted in the successful treatment of infectious hepatitis, wherein the simultaneous intravenous use of solubilized cortisone and a broad-spectrum antibiotic has shortened treatment from months to days and prevented liver damage, eliminating the threat of cirrhosis. This treatment of infectious hepatitis was used in cases at Mt. Sinai Hospital, New York City, and utilized an intravenous aqueous cortisone solution and broad-spectrum antibiotic developed by Dr. Max Jacobson.⁴

Furthermore, there have been strong indications that solubilized tissues can be used in the treatment of malignant diseases. For example, an aqueous solubilized liver solution, developed by the Foundation, has a pronounced erythropoietic effect. A noteworthy example of this regenerative effect is the maintenance of normal red and white blood count levels in patients undergoing intensive radiation treatment for malignancies.

Further clinical research by the Foundation has led to the belief that the solubilized materials are producing positive results in the treatment of multiple sclerosis, cerebral sclerosis, arthritis and various geriatric conditions. The Foundation is engaged in further research to confirm these results.

All research done in the Foundation's laboratory is especially conducted to safeguard the processing, sterilization and standardization of the solubilized materials. Fresh animal materials as well as dehydrated United States Pharmacopoeia materials are used as basic ingredients and the final products must meet or exceed the U.S.P. requirements before animal tests are begun.

Because of the advanced processes involved in creating these new materials, special testing procedures have been worked out in the Foundation's labora-

tory, such as colorometric and spectrophotometric tests to standardize the material. In the case of steroids, they are obtained originally in a powdered form and then brought into aqueous solution. Here again, special standards have been worked out to secure the uniformity of the material. As a result of these special standards and testing procedures, it has been established that the naturally occurring enzymes and steroids in the processed material are not altered after processing and that the processed material remains clear and can be diluted without any precipitate forming. Further results show that these new organic solutions have a definite thermostability which enables sterilization of the material.

When the processing is completed, the solubilized materials are subjected to animal tests to establish that they are completely innoxious and to determine potency, pyrogenes and sterility. This animal testing is conducted by an approved outside laboratory.

After animal tests have proven satisfactory and it has been determined that the solubilized materials are non-toxic, they are clinically tested by Dr. Jacobson to determine the methods to be used in treatment. When this phase is completed, limited amounts of the material are then released to clinical investigators, along with the results of the research up to that time, in order to arrive at a broader, more detailed analysis of the clinical results and to confirm the original findings. This detailed information is transmitted back to the Foundation in the form of working sheets which are then compiled for further study and research.

The Constructive Research Foundation, in addition to developing the methods for solubilizing steroids and tissues, is currently engaged in determining the proper choice, proportion, and method of production and distribution of the solubilized organic material. In addition it is gathering

clinical data to determine which cases benefit most from the treatment and to establish proper dosage.

The Constructive Research Foundation has been in existence since 1954, financed entirely from funds donated by friends of the Foundation and Dr. Max Jacobson, the Research Director.

The Foundation supports its own research laboratory, including maintenance of personnel and the physical plant. It provides all the materials and equipment used in the research as well as supplying the final processed solubilized materials used for clinical research by clinical investigators throughout the world.

The scientific research and clinical investigation of the Foundation is performed under the personal direction of Dr. Max Jacobson.

Dr. Jacobson, a private practitioner of general medicine for the past thirty-three years⁵ has an extensive background in laboratory and clinical research. A graduate of the Friedrich Wilhelm Universitate at Berlin in 1925, he established his practice and conducted research in Europe until 1936.

His research activities during the twelve year period, 1925-1936, included the investigation of: the influence and relationship of choline to arteriolosclerosis and hypertension; the reaction of blood chemistry to insulin, belladonna, ergotamine, and atropine; the influence of amino acids and glutonic acids on athletes; the isolation of sulfa and the use of sulfa treatment on gonorrhea; and, the development of a special treatment for the cure of dementia praecox. 10

In 1937, Dr. Jacobson settled in the United States where he became a visiting surgeon at the New York City Cancer Institute, 1937 to 1942. At the same time he established a private practice and continued, among other things, his research activities in the field of joint application of vitamins, amino acids

and lipotrophic elements to various diseases, particularly eye disorders¹¹ and, the development of the successful treatment of infectious hepatitis.¹²

As a direct result of his previous investigations, Dr. Jacobson's current research at the Constructive Research Foundation is directed toward developing processes in tissue therapy with emphasis on interaction with hormones, antibiotics, vitamins, and enzymes, using cellular material which has been completely solubilized through methods developed by the Foundation.

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