

KINETIC THERAPEUTICS IN GYNECOLOGY  
OR THURE BRANDT'S SYSTEM.

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During my recent trip to Europe, I became greatly interested in a method of treatment in gynecology which, it has been demonstrated to me, is peculiarly amenable to treatment by other means. This method is known to most practitioners under the name of Brandt's method or pelvic massage, a term which is not employed by the disciples of Brandt. The Germans call it Thure Brandt's system in gynecology, mechano-therapie—or Mannelle Behandlung—while the French school prefers the name, *kinésithérapie gynécologique* or kinetic therapeutics. It has the warmest advocates among great gynecologists such as Schauta, of Vienna; Schultze, of Jena; Freund, of Strassburg; Profanter, Prochownik, Ziegenspeck, and many other eminent specialists.

It might be interesting to consider for a moment the life of this layman, Thure Brandt, who for so long a time was bitterly opposed by the medical profession, but before whom the faculty now bows in grateful recognition of his valuable services to medicine. Thure Brandt received an education as a gymnast at the Royal Gymnastic Institute of Stockholm, where he was graduated in 1842. He remained several years in this Institute in the capacity of assistant teacher of gymnastics, and became proficient in treating various diseases by Swedish movements. In 1847, that is, five years after graduation, while a sergeant in the army, a soldier was brought to him with a complete prolapse of the rectum. There being no physician in the place, Brandt, in his endeavor to relieve the patient, employed quite an original plan of treatment and meeting with success, this became the nucleus of the present method of kinetic therapeutics.

He placed the soldier in the lithotomy position, with the pelvis somewhat raised, and by vibratory



movements and gentle upward traction upon the sigmoid flexure he succeeded in returning the bowel into the normal position. Having met with such marked success in this case, his attention was directed to a number of women whom he had previously treated at the Institute by Swedish movements, and he reasoned that prolapsed uteri or displaced organs might be restored to their normal position by this same method. He now made a careful study of anatomy and particularly of the female pelvic viscera, but it was not until the year 1861, that is fourteen years later, that a woman with a prolapsed uterus consulted him. The diagnosis of this case was not difficult. For twenty-seven years she had suffered from prolapsus and for the last three years had been obliged to carry her uterus in a bag, outside of the vagina. Fourteen days of daily treatment restored the uterus to its normal position and, what is more, it stayed there until she died, that is for twenty-three years.

The news of this almost miraculous cure spread rapidly and soon Brandt had over one hundred patients daily, most of them cases that had been given up as incurable by gynecologists. He worked daily, from morning till night and became an expert diagnostician. He loosened displaced and adherent uteri; pelvic exudates disappeared under his hands; ovaries that had been imbedded in pelvic masses were freed; enlarged tubes were reduced to their normal size. To this pelvic massage he joined the Swedish movements originated by Professor Ling and having, as he thought, well systematized his treatment, he published a brochure in 1864. Most of the Scandinavian physicians considered Brandt as a quack, and either refused to read a pamphlet on a new treatment in gynecology by a layman, or after reading it had no faith in the wonderful cures reported.

Following the advice of friends Brandt published, four years later, another brochure and this time in French. The translation was very imperfect; the medical terms chosen were those of the sixteenth century; a number of certificates of complete cure, given by the patients themselves, were added; all this would have been sufficient to condemn his work, but *an comble du ridicule*, he put his military honors on the title page. A Major of the Swedish Army, Chevalier of the *Ordre de l'Épée*, captain in the infantry regiment of Skaraborg, inventor of a new treatment in gynecology! Not recognized in his own country, and ridiculed in others he ceased his publications but continued in his practice and in the elaboration of his method.

In 1872 Dr. Sköldberg, of Stockholm, who was very much impressed with some remarkable cures he had witnessed, urged Brandt to settle in Stockholm and promised to assist in giving his method the sanction and publicity which it so well deserved. Sköldberg was professor of gynecology, and after having delivered to the students a lecture on Brandt's system, and having made preparations for practical demonstration, he died suddenly and left Brandt more alone than ever.

After every means of becoming reconciled with the scientific circles had failed, Brandt withdrew from publicity, determined henceforth to do all the good he could in relieving women of their suffering, and resigned that his method should die with him. His work remained obscure until 1885—he had now

reached the age of 67, when by a sudden turn of good luck his method became recognized. The way it happened was thus:

A rich Swedish merchant whose wife and daughter had been cured by Brandt of serious uterine disease, was anxious to have the treatment known outside of its limited circle. While stopping in Vienna he tried to interest in it a young and promising physician, Dr. Profanter, and induced him to visit Stockholm in order to see Brandt and study his method. At first a skeptic, he soon was converted into an enthusiastic believer and published several articles in favor of Brandt's method. The result was, that Germany's curiosity became aroused. The following year 1886, Brandt received an invitation (to come) to Jena in order to demonstrate his method in Schultze's clinic on sixteen well selected cases. A number of German gynecologists were present and all were much impressed by the skillful manner in which Brandt arrived at his diagnoses, which were perfectly correct although he examined without the help of an anesthetic, which can not be said of the specialists. The cases were then submitted to his treatment and a strict record kept. Schultze made some drawings of the worst cases in order to facilitate comparison; one of the assistants who did not look favorably upon this novelty persecuted the patients, thermometer in hand, thinking that sooner or later he would find a rise in temperature especially in the subacute exudates. These sixteen cases were published by Schultze in February, 1887, and he remarks that this new treatment is most valuable in affections of the female pelvis, and that he firmly believes that it is most efficacious in loosening old chronic parametritic adhesions and returning the uterus into its normal position.

Shortly after the publication of this article, seventy physicians not only from all parts of Germany, but also from Austria, Switzerland, Italy and England went up to Stockholm to become pupils of Thure Brandt, and soon after the gynecologic literature was overflowing with articles on this new treatment.

Most writers after eulogizing the remarkable results witnessed, make the assertion that practical demonstration alone can teach a method so full of complicated manipulations—that it can not be learned from books, no matter how elaborate the explanations be; and then immediately they proceed to give a more or less condensed description of the technique. I will not be guilty of the same inconsistency, and refer those who are interested in this treatment to Thure Brandt's book, "*Behandlung Weiblicher Geschlecht Krankheiten*," a work carefully supervised by Professor Schauta, of Vienna, or to Ziegenspeck's brochure, "*Über Thure Brandt's Verfahren der Behandlung von Frauenleiden*," published in the *Sammlung Klinischer Vorträge*, No. 353-354, Leipzig, 1890, or to a small work in French by my friend and instructor, M. Stapfer, late Chief of the Gynecological and Obstetrical Clinic of the Faculty of Paris, who was commissioned by the Minister of Public Instruction to study this new treatment under Thure Brandt and whose work is the report of this mission, read on his return from Sweden before the Académie de Médecine, session July 26, 1892.

Mr. Stapfer is one of Thure Brandt's greatest admirers, and has given up all other practice in order to devote his whole time to kinesiotherapy a name which he coined. He is in charge of the outdoor de-



partment of the Baudelocque Hospital, and I was fortunate enough to receive an appointment as his assistant and was enabled to work under his instruction and supervision.

*What is meant by Kinetic Therapeutics?*—It is the art of healing functional disturbances and organic diseases of women, by acting upon the genital organs and their circulation, by direct and indirect movements. The object is to bring about a healthier state of the circulation, lymphatic and sanguineous; to set free the various structures of the genital tract; to reestablish their anatomic and physiologic integrity—without cutting operations, without any surgical appliances, without medication, by manual skill alone.

*What are the indications for Kinetic Therapeutics?*—All functional disturbances such as amenorrhea, dysmenorrhea, menorrhagia, displacements of the uterus and its adnexæ with or without adhesions; perior parametric exudates of sanguineous or lymphatic origin; chronic and subacute inflammation of the uterine parenchyma with its consequences—leucorrhœa, hemorrhages, fungosities, ulcerations, oöphoritis, salpingitis—in short, nearly all the gynecologic miseries that fall to the lot of womankind.

*What are the contra-indications?*—Acute inflammation. Pus from any cause. Malignant neoplasms; the two latter points have to be taken in their broadest meaning—including syphilis, gonorrhœa, tuberculosis, actinomycosis, diphtheria, etc., cancer and sarcoma.

*Treatment.*—The rules of treatment as observed at the Baudelocque Hospital are, daily treatment,—any prolonged interruption is considered objectionable. The menstrual function does not only *not* interfere, but is considered the best time to work for loosening adhesions. Rectum and bladder must be empty. The patients are assembled in a very large room which serves as waiting and treatment room both; the advantage of this is obvious, and while awaiting their turn they watch the physicians going through the different movements with the other patients, thus having an object lesson which alone serves to teach the sometimes very complicated movements which precede and follow, and thus form part of each treatment. Several couches are in the center of the room and M. Stapfer and his assistants hard at work. The treatment couches are fourteen inches high; the patient lies with her thorax slightly raised, her knees drawn up; the operator sits to the left on a stool on a level with the couch; his left index finger in the vagina or rectum as is usually done in virgins and the right hand on the abdomen. The outer hand does all the work while the left index finger does not move but only acts as a support. The duration of treatment is from ten to fifteen minutes, except in cases of chronic exudates, half an hour to forty minutes.

Strict antiseptic precautions are taken. The hands are disinfected with solutions of bichlorid of biniodid, the latter being more in vogue in the Baudelocque Hospital. Glycerin is always added to these solutions. To anoint the index finger it is not simply dipped into some oily substance, but the right index rubs it thoroughly into the left and far above the metacarpo-phalangeal joint.

The treatment proper consists of three different kinds of movements; vibrations, circular friction and rectal effleurage or stroking. Analgesic treat-

ment always precedes the other, as a diagnosis can only be made when the tenderness has disappeared. This usually is the case after three to five days.

Chronic constipation, this never-failing symptom of retrodeviations is cured in a few days.

The gymnastic exercises originated by Ling and taken up by Brandt as part of the treatment are divided into three classes:

1. Those which deplete the pelvis.
2. Those which increase the afflux of blood.
3. Those which strengthen the muscles of the pelvic floor.

Time is too short to go into the details of the technique, and it would be a hopeless task to attempt giving a clear idea of it without illustrations or practical demonstration. Brandt does not consider his treatment complete without these Swedish movements. The Germans, in trying to improve upon Brandt's method, have done away with the gymnastic exercises on the ground that they take up too much time. The French school advocates them most highly and considers the movements a most valuable adjuvant, never to be omitted; in fact, a great many cases, especially those of amenorrhea and menorrhagia are treated and cured by exercises alone and without pelvic massage. M. Stapfer asserts that the Germans make a great mistake in discarding these muscular exercises, and he made this the subject of a paper read before the International Medical Congress at Rome, April, 1894.

Kinetic therapeutics, on account of the wonderful results obtained, would run a great risk of becoming the prey of quacks and advertising industrial gynecologists, were it not for the fact that a thorough knowledge of the anatomy of the pelvis is required. It is based upon truly scientific principles and herein lies its safeguard. Practiced by unskilled hands it may do a great deal of harm and may even prove fatal in cases of pyosalpinx. It is not sufficient to possess a good general knowledge of the female pelvis, its large nerve trunks and blood vessels, but a thorough study of the lymphatic circulation and of the sympathetic nervous system becomes a necessity. In dealing with an exudate, the operator endeavors to stimulate the lymphatics and promote absorption by working in the direction of the lymph channels. It has to be borne in mind that the lymphatics of the uterus, tubes and ovaries are directed outward, following the course of the utero-ovarian arteries and terminate in the lumbar glands. Should the exudate be near the cervix it has to be remembered that these lymphatics take the direction of the uterine artery and end in the pelvic glands.

The researches of Glax and Klemensiewicz have shown that in the center of an inflamed area, in consequence of the increased transudation, the lymph spaces become overfilled and the outflow is deficient, owing to the compression of the vasa efferentia. The operator therefore has to begin by making room in the lymphatics and by working at the periphery and gradually advancing toward the center, and as soon as the lymph stream begins to circulate he works in the opposite direction, that is, from the center to the periphery, following the direction of the lymphatics. Experiments of Lassar and Mosengeil have proved to the fullest satisfaction that kinetic therapeutics increases the rapidity of the lymph stream.

Lassar (in *Virchow's Archiv.*, vol. LXIX, p. 153). This experimenter by chemic and thermal irritation



produced an inflammation in the paw of a dog, and then introduced a canula into the peripheral end of a severed lymphatic and a few drops of lymph flowed out slowly. But as soon as massage was practiced the lymph was seen to spurt out.

Mosengeil's classical experiment described in the *Arch. f. Klin. Chir.*, vol. XIX, p. 428, shows conclusively the value of massage. He injected animal charcoal into the joints of rabbits and considerable swelling took place. One joint thus treated was submitted to massage; the other was left alone. In the first one the swelling disappeared; the latter remained enlarged. On autopsy the swollen joint revealed the black substance still *in situ*, while the massed articulation was free from it. This experiment not only proves the usefulness of kinetic therapeutics, but shows the danger of such a method applied where the quality of the exudate is of an infectious nature.

The nerve supply of the lymphatics is derived from the sympathetic nervous system. This latter is of the utmost importance to the kinetic therapist. I could not help wondering how little is said in the standard text-books of gynecology on the rôle played by the sympathetic nervous system; in fact most of the books on anatomy treat this system with marked indifference. In my opinion kinetic therapeutics is directed chiefly to the lymphatic and sympathetic systems and it is to be hoped that its practice will cause some study in this rather unexplored field, and throw some light on the oftentimes obscure pathology and symptomatology of uterine disease. If we take a case of analgesic treatment we will soon find that we come across certain spots that are particularly painful and in making a careful study of the anatomic relations we can always trace these "points douloureux" to sympathetic ganglia. There is for instance, at the junction of the uterus and Douglas' fold, to the right and left of the posterior vault of the vagina, a most tender point, which when slightly touched makes the patient wince and here we find the uterine ganglia. Occasionally the sacral nerves can be traced back to their foramina at the level of which four sacral ganglia are found, which are united to each other and send numerous branches to the hypogastric plexus. This whole region is in certain affections highly sensitive and causes the intense reflex symptoms so often noticed in uterine disease.

The sympathetic nervous system holds a place far more important than is usually attributed to it, and even a superficial glance at the anatomy of the pelvis will reveal the fact that the pelvic viscera derive their main nerve supply from the sympathetic system. At times this nervous system becomes one of the most powerful factors in the human anatomy, namely in causing the expulsion of the fetus at term. Obstetricians consider the center of parturition to be situated in the medulla oblongata. How does the impulse reach the uterus? Partly by way of the spinal cord through the sacral nerves, partly through central filaments of the sympathetic nervous system, attaining its maximum of intensity in the plexus uterinus magnus, situated at the level of the bifurcation of the aorta. Four centimeters below, this plexus divides into the two hypogastrics, and these, together with numerous branches from the lower lumbar and superior sacral ganglia, form two divisions; the smaller one supplying and surrounding the rectum, and the larger one, after uniting with the

sacral nerves, forms the cervical ganglion, which supplies the whole uterus and especially the cervix.

Now let us travel backward this same road, and many of the obscure reflex symptoms can be explained. If we have to deal with chronic exudates, with the unavoidable pressure effects upon the nervous tissue in the pelvis, the impulse will travel upward to the medulla and on its way produce the various reflex symptoms which are called by Freund cerebro-spinal. We will observe bearing down pains, sensation of fullness in the pelvis, backache, colicky pains, chronic constipation, nervous dyspepsia, vomiting, asthma, pain in the cardiac region, palpitation, globus hystericus, migraine, amblyopia, cataleptic and even epileptic attacks.

Kinetic therapeutics is a valuable auxiliary in curing displacements of the uterus. When might we speak of an organ as being displaced, whose ligaments permit movement in every direction so that there is no one normal position a departure from which would constitute a pathologic displacement? Physiologic displacement is an essential feature of a normal uterus and as soon as it is in the least interfered with we know that something is wrong. No subject in anatomy has perhaps caused such wide differences of opinion as the so-called normal position of the uterus. Great anatomists as Luschka, Braune, Cruveilhier and Henle consider it normal with the fundus in the hollow of the sacrum and according to Schultze, the long axis of the uterus is nearly parallel to the horizon. More recent investigators speak of a normal antelexion, but who can guarantee that they are right? Post-mortem we see healthy uteri nearly always in retroversion and during life the gynecologist does not often encounter a healthy organ.

We know to-day that deviation of the uterus in itself does not call for treatment, and every gynecologist has seen cases of marked displacement without a single symptom. Some authors have gone so far as to deny that any pathogenic importance whatever attaches to simple displacements without adhesions. It is certain that adhesions give at once a different aspect to the deviation and according to the degree of mobility destroyed we have to deal with the different reflex symptoms, from the multiple neuralgia to chorea (Schröder) and hystero-epilepsy (Sieliski). It is the province of kinetic therapeutics to remove the cause of displacements.

Exudates are treated as described above.

Adhesions of parametric origin are disintegrated and worked back into the circulation.

Shortened ligaments are stretched and return to their normal length in a remarkably short time. If the shortening be of a peritoneal nature the operator must be satisfied if adhesions are separated and the uterus regains a relative degree of mobility; the peritoneum if once contracted does not regain its normal elasticity. When we come to treat relaxed ligaments we encounter more difficulty and we have to take into consideration that they consist merely of connective tissue and scanty muscular fibers. These latter not being sufficiently numerous to restore the elasticity of the ligaments. Some enthusiasts of Brandt's method claim to have shortened these supports. The only way in which I could account for their success, which does not otherwise coincide with physiologic laws would be that by mechanical irritation they have produced an inflammation which



naturally resulted in contraction of the ligaments.

I will say one word on the treatment of chronic constipation, although it does not, strictly speaking, belong to pelvic massage. It is perhaps one of the most valuable presents we have received from the hands of Thure Brandt. I have seen cases of habitual constipation where three cathartic pills, together with 3 ss. ol. ric. and an enema were the daily order of things, and such cases have been cured in a few days only by kinetic therapeutics.

The reason of these remarkable results is easily understood. Once more the sympathetic nervous system has to be brought into the foreground. We all know that the physiologic activity of the alimentary canal depends on the proper innervation and circulation. Virchow has shown that in innervation disturbances, in consequence of which the muscular fibers of blood vessels lose their energy and the elastic fibers become relaxed, thus interfering with the physiologic function of the intestine, kinetic treatment is eminently satisfactory in strengthening the muscles of the abdomen, producing peristalsis and in the mechanical removal of skybala from the colon. Another most favorable result is the beneficial effect by reflex action upon the stomach.

Subinvolution of the uterus is cured by this method in so short a time that one can but wonder at it. It is not rare to see cases of enormously enlarged uteri reduced to their normal size in a few days.

Cases of metritis and endometritis respond to treatment in a relatively short time; but should the latter be due to fungosities, curetting would be the more rational treatment.

It is remarkable how quickly all the subjective symptoms disappear even in the most severe cases, while the objective symptoms remain behind, to serve as a guide for the continuation of the treatment, long after the patients consider themselves cured. Kinetic therapeutics is no longer considered a novelty, but holds a high place in the estimation of the leading gynecologists. The most prominent specialists abroad have given it a fair trial and acknowledge that not only did the treatment fully come up to their expectation, but that it rendered unnecessary in many instances surgical interference, particularly such operations as Battey's. If kinetic therapeutics had done nothing more than to give the death blow to Battey's operation this fact alone would suffice to give this method a foremost rank in gynecology.

Alexander's operation for shortening the round ligaments, with its modifications by Adams and Alquié has a dangerous rival in kinetic therapeutics. Most of the disciples of Thure Brandt are of the opinion that ventro-fixation has had its day and will be substituted by the more rational kinetic therapeutics. Ventro-fixation as recommended by Koeberlé, Olshausen, Lawson Tait, Kelley, Sänger and Leopold is at its best a dangerous operation and by no means justified by its results. Laparotomy, the forcible breaking loose of adhesions and stitching of the uterus to the abdominal parietes is a serious undertaking, especially if we think that after all it is only the substitution of an anterior for a posterior fixation and oftentimes a double fixation. The dusting of aristol, dermatol or idoform over the loosened adhesions, or the application of sterilized gauze, or even gold leaf, has proved inadequate.

The cure of prolapsus uteri is, although wonderful in the hands of Brandt, not universally successful if undertaken by his followers, and Winckel made the statement that colporrhaphy will, together with Brandt's system, be in the future the treatment for such indications. It will easily be seen that where the pelvic floor gives no support whatever, Brandt's treatment alone can not hold the uterus up. In these cases the levator muscle is found to be severed and operations such as devised by Freund, Martin and Winckel will be found beneficial, as they bring about a union of the muscular fibers of the levator and the vaginal wall. Brandt's per cent. of cure of prolapsus is between 70 to 80 per cent. and it is doubtful whether surgical operators have the same good result. There are cases on record where five and more operations did not prevent the descent of the organ and Le Fort's operation for complete closure of the vagina had to be resorted to.

After having taken up so much time in trying to bring out the advantages of kinetic therapeutics, I have to point out its disadvantages. All that can be said against it, even by Brandt's adversaries, is its troublesomeness, the difficulty of becoming familiar with it—a trip to Sweden or Germany to study with one of Brandt's disciples being indispensable—and last, not least, the long duration of the treatment extending in chronic cases over several months.

Brandt teaches no longer, having arrived at the venerable age of 77 years. Gynecologists from all parts of the civilized world are constantly applying for the privilege of studying under his direction; but within the last year or two he has felt it to be incumbent upon him to transfer the duties of teaching his method to his disciples. After many years of bitter disappointment, harsh criticism and antagonism he now has the satisfaction of seeing his labors appreciated, his method adopted by the scientific world and of having his name handed down to history as one of the great philanthropists of his day.

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