REPORT ON THE CONFERENCE, SMOLENSK, APRIL’28TH

On April 28, 2017 the Department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University held the conference “Neuroreceptor therapy. The Method of Proprioceptive-Deep Tendon Reflex (P-DTR) as a division of functional neurology. From theory to practice” under the Regional State Budget Healthcare Institution “The Medical Rehabilitation Hospital”.

The Conference covered the theoretical foundation of the method, its practical exhibition and the treatment of patients. The presentations were given by Head of the Department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University professor Gribova N.P. and physician, Board Certified in neurology, postgraduate student from the Department Korenevskaiia I.A. who represented the data of the neurophysiological study “Specifics of the Electroneuromyography Parameters in Patients with Musculoskeletal Pain Syndromes Before and After the Use of the Proprioceptive-Deep Tendon Reflex Method (P-DTR)” carried by the Department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University.

The number of studied diseases is rather high, all study subjects suffer from a pain syndrome, usually muscle and fascia pain; After the use of the P-DTR method, 100 % of subjects had a significant clinical improvement - the pain syndrome decreases or disappears, while the range of movements enhances.

The electroneuromyography study was conducted according to a special program and stated goals:
- to study the mutual effects of the primary and secondary dysfunctions;
- to confirm the existence of paired receptive fields and compensatory effects of secondary dysfunctional fields on primary dysfunctional fields.

The paired receptive field theory was assessed by registering the bioelectrical activity of the zones of primary and secondary receptor dysfunction. An application package was used to register the total bioelectrical receptor activity of a certain area, excluding the PDE muscles. Needle electrodes were used in this study; they were applied to the anatomical location of a certain type of receptors (for instance, Golgi tendon organ).

The bioelectrical activity study was done using two channels and according to the following program:
 ● Channel 1 - from the primary receptor dysfunction zone
Channel 2 - from the secondary receptor dysfunction zone.

Measurements:
- 1 – without stimulation
- 2 – following stimulation of the primary dysfunction zone with a proper stimulus
- 3 – following stimulation of the secondary dysfunction zone
- 4 – following stimulation of the primary dysfunction zone with an anti-stimulus
- 5 – following stimulation of the secondary dysfunction zone with an anti-stimulus
- 6 – following stimulation of a non-dysfunction zone
- 7 – following the P-DTR treatment

Clinical example of a receptive field bioelectrical activity study.

Patient М., male, 44 years old

1) Primary dysfunctional receptive field zone, average amplitude 66 µV:

2) Primary dysfunctional receptive field zone following stimulation of the secondary field zone, average amplitude 52 µV:

3) Primary dysfunctional receptive field zone following anti-stimulation, average amplitude 48 µV:

4) Primary dysfunctional receptive field zone, after P-DTR treatment, average amplitude 46 µV:

5) Secondary dysfunctional receptive field zone, average amplitude 48 µV:
6) Secondary dysfunctional receptive field zone following stimulation of the primary field zone, average amplitude 55 µV:

7) Secondary dysfunctional receptive field zone following anti-stimulation, average amplitude 38 µV:

8) Secondary dysfunctional receptive field zone, after P-DTR treatment, average amplitude 33 µV:

Study data obtained in 96 patients were used to obtain a diagram showing the change in the bioelectrical activity of the receptive fields (interferential EMG amplitude):

Exteroceptive suppression of voluntary muscle activity before and after the use of P-DTR was used to evaluate the effects of this method on the suprasegmental antinociceptive systems. The
electrodes were applied in the following manner:

The active electrode was placed on the temporal muscle, the reference electrode at the tragus level, and the stimulant electrode at the mouth angle level. An electrical impulse is delivered while the teeth are strongly pressed together. The ES periods appear as periods of suppressed voluntary muscle activity.

Characteristically, a decrease in the duration of the ES periods was observed in almost 100% of the cases after the use of P-DTR. This indicates that the method exerts a direct effect on the suprasegmental structures.

ES after P-DTR

The study data obtained in 120 patients were used to obtain a diagram showing the change in the ES periods before and after P-DTR treatment:

To evaluate the state of the patient’s skin vegetative reactions, we used an evoked skin sympathetic potential from the upper extremities based on the amplitudes (mV) obtained before and after the P-DTR treatment, respectively.
Average values of obtained digital electroneuromyography data were calculated and further analyzed.

The active electrode was placed on the palm, the reference electrode - on the back of the hand; stimulation was contralateral, in the mid-forearm, outside of nerve projection areas.

An example of ESSP change before and after P-DTR:

*Before the P-DTR treatment, amplitude 3 mV.*

![Graph showing ESSP change before P-DTR treatment](image1)

*After the P-DTR treatment, amplitude 1.2 mV.*

![Graph showing ESSP change after P-DTR treatment](image2)

Average data obtained in 96 subjects:
In conclusion, we have demonstrated the relationship between the primary and secondary receptive fields, and have shown that a change in the afferentation of the primary receptive field entails a change in the afferentation of the secondary receptive field. The data we obtained are in agreement with the provisions of the paired receptive fields theory.

ES is an electroneuromyography method that proves the efficacy of P-DTR as a treatment for pain, including its central structures.

The ESSP changes observed before and after the use of P-DTR indicate stabilization of the vegetative manifestations of pain.

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At the Conference, the author of the method Doctor Jose Palomar Lever showed a drastically new neurological approach to diagnose and treat the functional disorders. He presented a new concept of “Neurological Health” which embraces structural, biochemical, neurological and emotional-behavioral aspects of a human body.

Jose Palomar refined the classical MMT and offered a Neurological MMT as a new diagnostic tool.

He also presented a system model showing how a central nervous system works with information. The CNS is constantly receiving the information from the environment, analyzing it and giving a motor or gland response. Doctor Palomar offered tools for practical diagnosis and correction of the aberrant afferent information input, its interpretation faults and a consequent incorrect motor response from the locomotor system.

Doctor Jose Palomar described the theoretical basis of the method and devoted most of the time to the practical part – the demonstration of the method on the patients with pain syndromes of various geneses. Those patients had the disorders of neurological and orthopedic nature. The guests present were amazed at the rapid results and the impact of the method. All patients who were examined (12 overall) observed the decrease or total disappearance of their pain syndrome and the increase of the range of motions and disappearance of antalgic posture.

It is undeniable that the method of P-DTR requires further researches, and currently, they are being carried in Russia, Switzerland and the United States. However, even today we can say that the method appears to be a fundamentally new concept and it delivers excellent results in treatment of various functional disorders.

**Diagnoses and treatment results of the examined patients**

1. Deforming gonarthrosis of second degree, moderate pain syndrome, chronic relapsing course in the
exacerbation phase. Reports of pain in the right knee joint during gait increasing during physical activity or body cooling. After the treatment by the P-DTR method, the regression of symptoms is observed, no complaints when in the state of rest or under provocation.

2. Traumatic injury of a tendon-ligament system, chronic pain syndrome. Reports of pain during motion and physical activity, difficulties in starting a motion after a long-term static condition. After the treatment by the P-DTR method, a significant abatement of pain during gait is observed, the first and following motions do not cause discomfort or pain.

3. Dorsopathy, vertebrogenic lumboischialgia against osteochondrosis of lumbar spine L4-S1 II degree, reflexive-tonic pain syndrome. Reports of a drawing pain in lumbar spine with radiation to the right leg up to the shank, restriction of a spine movement in flexions forward. After the treatment the regression of symptoms such as the pain abatement are observed, as well as the increase in the spine mobility (when leaning forward, the patient can reach the ground).

4. Lateral epicondyle on the right side, severe pain syndrome, permanent course. Reports of pain on the outside of the elbow joint increasing with the elbow joint movement; because of pain, difficulty in lifting and moving objects. After the treatment, the regress of the pain syndrome in a static condition and under stress (provocations) is observed.

5. Adhesive capsulitis, moderate pain syndrome with significant restriction of mobility in the shoulder-joint, chronic course. Complaints: pain in the shoulder-joint, especially at the attempt of movement. Drastic restriction of the shoulder-joint movements, especially when laying hands behind the back. Although after the P-DTR treatment the pain remained, it became less intense, the range of motions increased by 50%. Recommendations regarding further treatment were provided.

6. Vertebrogenic right-lateral cervico brachialgia against osteochondrosis of the cervical spine II degree. Reports of pain in the cervical spine with radiation to the right arm up to the wrist, restriction of mobility in the cervical spine during the course of 6 weeks. According to the patient, conservative treatment did not bring the relief. After the P-DTR treatment, a complete disappearance of pain, as well as restoration of mobility in the cervical spine are observed.

7. Post-traumatic coccyalgia, moderate pain syndrome. Reports of pain in sacrococcygeal region of spine when in a sitting position, the pain disappears during gait. The patient had been suffering from the pain for 3 years. After the treatment by the P-DTR method, the patient noted that there was no more pain when she was sitting.

8. Traumatic injure of the knee joint cruciate ligament. State after surgery. Reports of the limited mobility in the knee joint, pain during gait and in the morning hours. According to MRT, the anatomical integrity of the cruciate ligament has remained. After P-DTR – the regression of the pain syndrome, restoration of the joint mobility.

9. Heel tendon tendinitis on the right side. Complaints: semiflexion of the foot from the external side, pain in the region of the heel tendon during gait. After the P-DTR treatment the pain significantly decreased; with the limb under the physical stress, the range of mobility in the ankle joint increased.

10. Patellar tendinitis on the right side, moderate pain syndrome. Complaints: when stretching, pain in the knee joint, primarily under physical stress. The patient is a professional bicyclist, had been suffering from the pain throughout a year. After the P-DTR treatment, the mobility of the knee joint when stretching was restored, the patient noted that there was absolutely no pain when stretching the knee joint.

11. Dorsopathy. Spondylarthrosis of thoracic spine with the syndrome of intercostal neuralgia on the Th9-Th11 levels on the left side. Complaints: drawing and fulgurating pain in left side of the
posterolateral surface of the chest, increasing with inspiration and turn to the affected side. After the P-DTR treatment, the patient noted complete absence of pain.

12. Deforming coxarthrosis of the 2nd degree on the right side, chronic relapsing course, protracted exacerbation. Complaints: pain during gait, when going down stairs, restriction of mobility (abduction of hip joint). After the P-DTR treatment, the decrease of the pain during gait is observed, as well as considerable increase of mobility in the hip joint.

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The guests of the Conference included the physicians of various specialities from Smolensk, Bryansk, Tver, Roslav and Moscow – neurologists, manual therapists, reflexotherapists, dentists, recreation therapists. Among them there were young practicing physicians as well as acknowledged reputable specialists such as Associate Professor at the Department of Nervous Diseases and Neurosurgery of the Medical Faculty, Head of the Division of Pain and Peripheral Nervous System Disorders of the Clinic of Nervous Diseases UKB No. 3 of the Clinical Center at the Federal Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University of the Ministry of Health of Russian Federation Candidate of Medicine, Isaikin Alexey Ivanovich;

Physician, manual therapist, Candidate of Medicine Vanogel Vyacheslav Georgievich;

Candidate of Medicine Tkachev Andrey Michailovich;

Candidate of Medicine Averchenkova Anastasia Alexandrovna;

High level certificate physician, Board Certified in neurology, manual therapist of Smolensk Regional Physical Health Center Volkov Arkadiy Alexandrovich;

Physician, Board Certified in neurology, manual therapist of the Regional State Budget Healthcare Institution "Medical Rehabilitation Hospital" Zelenov Oleg Vasilievich and many others.

The guests actively participated in the practical part of the Conference, asked Doctor Jose Palomar and the members of the Department a great amount of questions, many of them were highly impressed by the method and expressed their willingness to study it in the future. During the entire time, the Conference was marked by a warm, friendly atmosphere and unfading interest towards its subject. It ended with a discussion on the method and the results it provided.

Having observed a great number of patients treated by the method, the specialists present at the Conference concluded that P-DTR could be applied as an independent treatment allowing patients to restore correct biomechanics of their bodies and solve many problems without pharmaceuticals. In other cases, P-DTR could be used as a supplementary treatment along with pharmaceuticals and treatment procedures of therapeutic and surgical nature.

It is obvious that the treatment by P-DTR allows to restore correct proprioception, acquire normal tonicity of certain sets of muscles, improve posture, get rid of antalgic posture, align gait and further to raise the efficiency of therapeutic treatment such as a physical treatment and others.

Moments in Photos

Dr. Jose Palomar – the author of the P-DTR method, orthopedic surgeon, neurologist, member of the International Association DIBAK.
Gribova N.P. - Professor, M.D., Head of Department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University.

Volkov A.A. (first row, 2nd from the left) – high level certificate physician, Board Certified in neurology, manual therapist of Smolensk Regional Physical Health Center.

Korenevskaia I.A. - physician, Board Certified in neurology, postgraduate student at department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University.

Isaikin Alexey Ivanovich - Associate Professor at the Department of Nervous Diseases and Neurosurgery of the Medical Faculty, Head of the Division of Pain and Peripheral Nervous System Disorders of the Clinic of Nervous Diseases UKB № 3 of the Clinical Center at the Federal Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University of the Ministry of Health of Russian Federation Candidate of Medicine.
Some of the physicians tried the method on themselves and were impressed:

The journalists of The Smolenskie Novosti were also interested in the newly presented method:
Patients treated by Jose Palomar during the Conference:

Volkov A.A.

High level certificate physician, Board Certified in neurology, manual therapist of the Regional State
Autonomous Health Institution “Smolensk Regional Physical Health Center”:

“I think this method is very progressive. And it has a number of advantages: it is painless for a patient, easy to apply for a physician, shows results right away. I am a manual therapist, and my professional knowledge and skills help me to clearly see the changes happening in the biomechanics of a patient’s body. That’s why I’m certain that this method should be studied and mastered. Of course, it requires a large amount of knowledge both in neurology and kinesiology, but if there is a will, there is a way - you can learn anything if you really want to. As a professional, I would also like to say that the treatments by this method truly work and the results sometimes are rather impressive not only because the treatments turn out to be highly effective, but also because the results can be seen instantly. I wish I had come across it back in the day.”

Gribova N.P.
Professor, M.D., Head of Department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University:

“Science does not stand still and there are changes occurring in medicine too. I always stand for new methods if they bring results. The results of the treatments by this method prove its effectiveness, and the preliminary results of the researches conducted by our department prove the existence of an interrelation among the receptor fields with which Dr. Palomar works. I am proud that it has been our department that developed a neurophysiological program and is currently carrying out the researches on this method. All this is a result of big intellectual and physical efforts of our department staff. The method works, and this is what counts, although the fact that it requires further scientific studies is undeniable. I believe that we are on the verge of new scientific discoveries in medicine and particularly in neurology.”

Korenevskaya I.A.
Physician, Board Certified in neurology, postgraduate student at department of Neurology and Physiotherapy of the Faculty of Additional Professional Education of Smolensk State Medical University:

“I am a young professional who is keen on learning and discovering all new. For me, P-DTR hasn’t become just a method of treatment but an embodiment of an entire school. In order to be able to work with this method, I had to upgrade all my knowledge about a locomotor system anatomy, kinesiology, biomechanics of a human body. The P-DTR method requires a huge amount of knowledge and excellent analytical skills. I had once again to revise and rethink the physiological functioning of a human body. I am glad that this method, which is successfully applied abroad, is also used in Russia, and particularly in Smolensk. We can help a lot of people to solve their health problems now. As for the research itself, we have gone through a big amount of failures before we were able to create and develop the neurophysiological program. The goal we had required a great deal of insight and experience in neurophysiology and a sound technical support. P-DTR helps to solve many functional problems, which include pain syndrome, limited range of motion, biomechanical abnormalities. The method can be used both independently and complimentarily to such medical treatments as for example a therapeutic physical training. And since the method does really work, I am sure, the number of P-DTR specialists within the following few years will be growing at an exponential rate. In the areas of neurology, orthopedics and rehabilitation new doctors will emerge being able to achieve the impossible and beyond.

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Today, P-DTR claims to be the only clinical method worldwide, which holds a theoretical basis defining efficiency of other medicine-free methods of treatment and their temporary or permanent effect. Efficiency and logic of P-DTR precisely arouse interest in studying the method by many physicians of different specialties.

Dr. Jose Palomar and his team hope that with more and more neurologists interested in conducting similar
applied researches of the method, it can soon become an accepted form of treatment worldwide.