

METHODOLOGY OF OSTEOPATHY: A MODERN OUTLOOK

An approach which made possible the homologation of osteopathy in Russia



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Any philosophical conclusion must always be preceded by basic principles. They serve as a center, around which you can draw a circle, inside of which you can find all the evidence of the truth you want to establish.

A.T. Still

Abstract

Due to inadequate formalization of osteopathic performance requirements and lack of precise concepts, terms and standards, some problems emerged when osteopathy was integrated into the healthcare system. It is necessary to have a precise definition and methodology of osteopathy, to study somatic dysfunction as a specific object of research and treatment and to develop a standard form of osteopathic assessment.

In order to standardize the process of osteopathic diagnosis and formalize the osteopathic assessment, we have expanded and deepened the definition of the term "somatic dysfunction."

We define global, regional and local levels of somatic dysfunctions depending on the manifestation of biomechanical, neurodynamic and hydrodynamic (rhythmogenic) constituents.

We developed a form of registration of somatic dysfunctions, which allows us to standardize osteopathic assessment, and to study qualitative and quantitative changes of somatic dysfunctions on its basis. The use of a standard form of evaluation makes it possible to understand the reasoning of an osteopath and assess the accuracy of treatment selection.

The way of systematization of somatic dysfunctions can be taken as a basis for carrying out research, accumulation of data about the prevalence of somatic dysfunctions in different populations and in different pathological conditions and to utilize statistical analysis. Classification and standardized registration of somatic dysfunctions extend the clinical possibilities of osteopathy, allow us to study the incidence of somatic dysfunctions, and to prove the clinical effectiveness of osteopathy in different pathological conditions in terms of the principles of evidence-based medicine.

Standardization of diagnostics of Somatic Dysfunction

New! A protocol of osteopathic diagnostics has been developed (19 compulsory tests). If necessary, additional osteopathic tests are performed. The protocol was approved by the Russian Osteopathic Association.

Diagnostic tests:

- Biomechanical – to find alteration of mobility
- Neurodynamic – to find alteration of reflex reaction (inhibition)
- Assessment of the main rhythms (cardiac, respiratory, cranial)
- Assessment of local and regional blood and lymph flow

New! Results of examination are entered in a standard form, compulsory for all the medical organizations, which contributes to:

- Communication among medical doctors
- Continuity in examination and treatment of patients
- Possibility to evaluate the quality of medical care
- In order to specify the diagnosis and to exclude contra-indications an osteopathic doctor recommends consultations with other specialists and necessary laboratory and instrumental examinations.

OSTEOPATHIC EXAMINATION

1. Complaints during the visit

2. Somatic status: orofacial health, constitution, HR, mucous membranes, respiratory, arterial blood pressure, pulse, abdomen

3. OSTEOPATHIC STATUS

4. OSTEOPATHIC REPORT

5. Disposition: pain, diagnosis, RBD-19 code

6. Treatment: RBD-10 code

7. Capacity to work

8. Recommendations

9. Conclusions of specialists

10. Examinations

Subsequent osteopathic examination

Doctor: _____



Back page of the supplement to the registration form № 025 and № 112

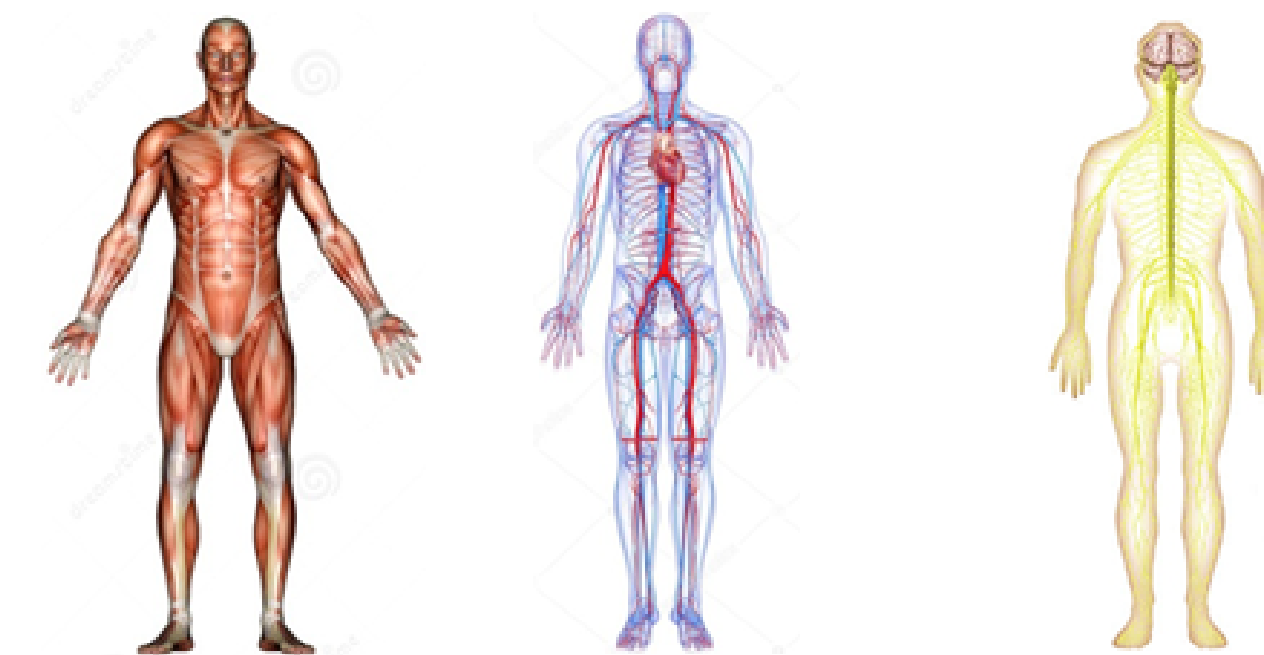
4. OSTEOPATHIC REPORT

Disorder/Level	Biomechanical disorder 1/2/3 points	Rhythmogenic disorder 1/2/3 points	Neurodynamic disorder 1/2/3 points
Global	1 2 3	Cranial 1 2 3 Cardiac 1 2 3 Respiratory 1 2 3	Psycho-viscero-somatic: 1 2 3 Postural: 1 2 3
Regional	Region: soma viscera Head 1 2 3 Neck 1 2 3 1 2 3 Upper extr. 1 2 3 Thoracic 1 2 3 1 2 3 Lumbar 1 2 3 1 2 3 Pelvic 1 2 3 1 2 3 Lower extr. 1 2 3 Dura-matral 1 2 3	Cranium 1 2 3 VS SV C1 - C3 1 2 3 1 2 3 C4 - C6 1 2 3 1 2 3 C7 - Th1 1 2 3 1 2 3 Th2 - Th5 1 2 3 1 2 3 Th6 - Th9 1 2 3 1 2 3 Th10 - L1 1 2 3 1 2 3 L2 - L5 1 2 3 1 2 3	
Local	Specific somatic dysfunctions are indicated in this field (acute or chronic):		

Dominant somatic dysfunction:

Somatic dysfunction (SD, M.99) – specific object of osteopathic manipulation

- **New! Somatic dysfunction (SD)** is a reversible change of structural and functional state of body tissues, which manifests itself by alteration of mobility, microcirculation, production and transmission of endogenous rhythms and neural regulation.
- **New!** It is suggested to evaluate the **intensity of SDs** in points from 1 to 3.
- **New! Dominant somatic dysfunction** is the maximal SD in terms of severity in points, It refers to the highest level. Its correction is the main goal of osteopathic session.
- **New! SDs can manifest themselves in the body on global, regional and local levels.**



Disorder/Level	Biomechanical disorder 1/2/3 points	Rhythmogenic disorder 1/2/3 points	Neurodynamic disorder 1/2/3 points
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Dominant somatic dysfunction:			

Levels and corresponding SDs

The structure of somatic dysfunctions conventionally includes three constituents:

- **Biomechanical constituent** is a reversible alteration of mobility, flexibility and elasticity of body tissues;
- **Rhythmogenic constituent** is a reversible alteration of production, transmission and synchronization of endogenous rhythms;
- **Neurodynamic constituent** is a reversible alteration of neural regulation .

New! A specific feature of this classification is that it includes the global level of manifestation of SDs, in comparison with traditionally described local and regional SDs.

New! Global biomechanical disorder is a functional alteration of the mobility in one of the planes of space, which doesn't correspond to the age, neither related to the pain syndrome and which affects three or more body regions.

New! Global rhythmogenic disorder is a functional alteration of production of endogenous rhythms (cranial, cardiac, respiratory).

New! Global neurodynamic disorder is a functional alteration of neural regulation which manifests itself by psycho-viscero-somatic (secondary multi-regional somatic restrictions of mobility of tissues, which are related to the anamnestic and psycho-emotional impact) and/or postural disorders (change of the body position, related to the alteration of proprioception).

Principles of Osteopathic Treatment

- 1) Work with the identified dominant SDs preserving the holistic approach to the human body.
- 2) Choice of specific correction technique, in view of the intensity of a constituent of SD:
 - predominance of the biomechanical constituent – techniques for connective tissue structures (the "collagen-elastin" system),
 - predominance of the alteration of neural regulation - techniques aimed at restoring inter-neuronal interactions and neural conduction (reflex arc),
 - predominance of the hydrodynamic / rhythmogenic constituent - techniques aimed at restoring viscous characteristics of interstitial tissues (the "gel-sol" system).
- 3) Correction in view of the level of manifestation of SDs:
 - From global to regional
 - From regional to local.
- 4) Assurance of continuity in treatment if a patient changes his doctor.

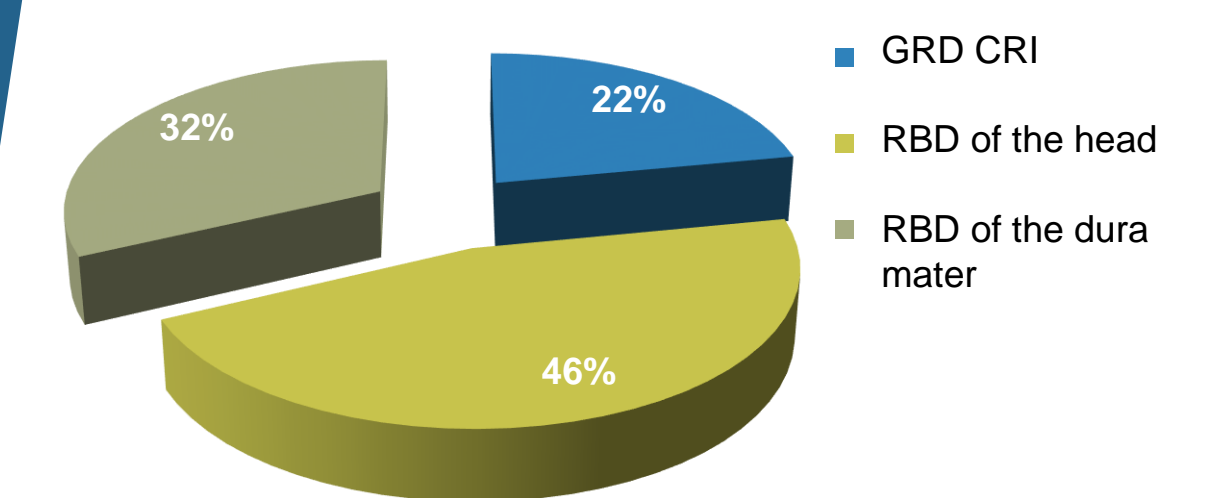
Clinical Research

- Organization of multicenter research
- Statistical analysis of results

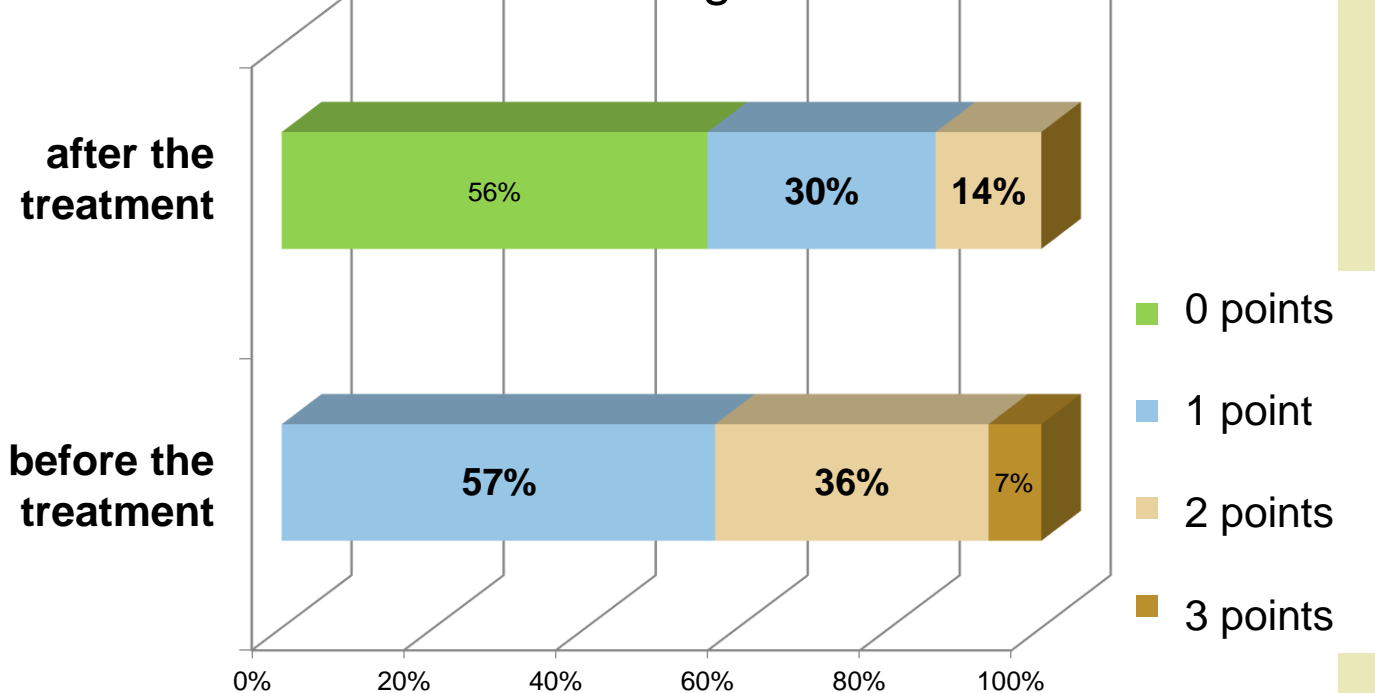
Example: «Assessment of effectiveness of OMT in babies with delayed motor development in presence of the perinatal affect of the nervous system (F.82)»

Randomized groups	Treatment
Control group n=50	standard
Main group n=50	OMT + standard

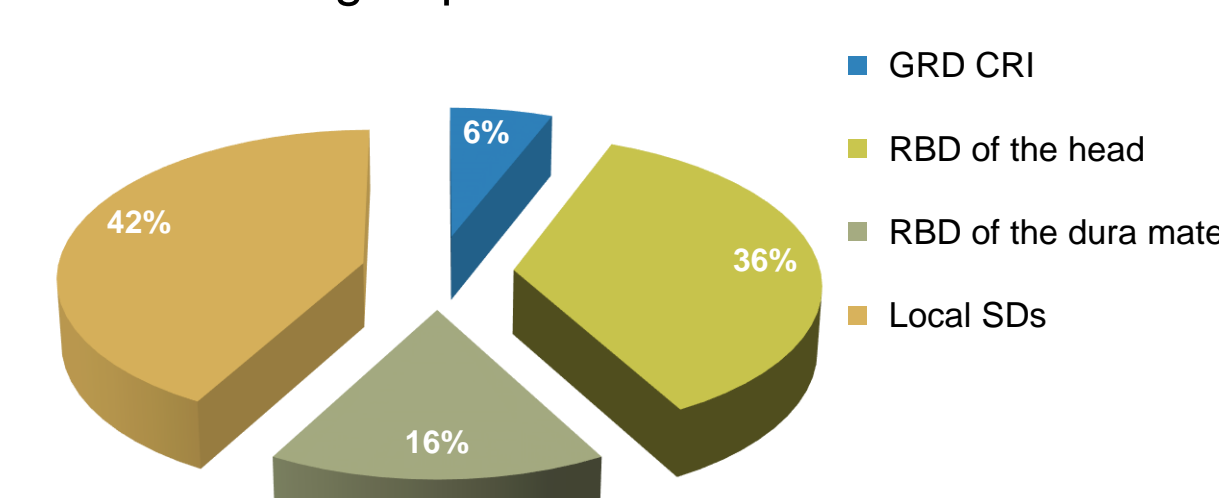
Structure of dominant somatic dysfunctions in children before the treatment



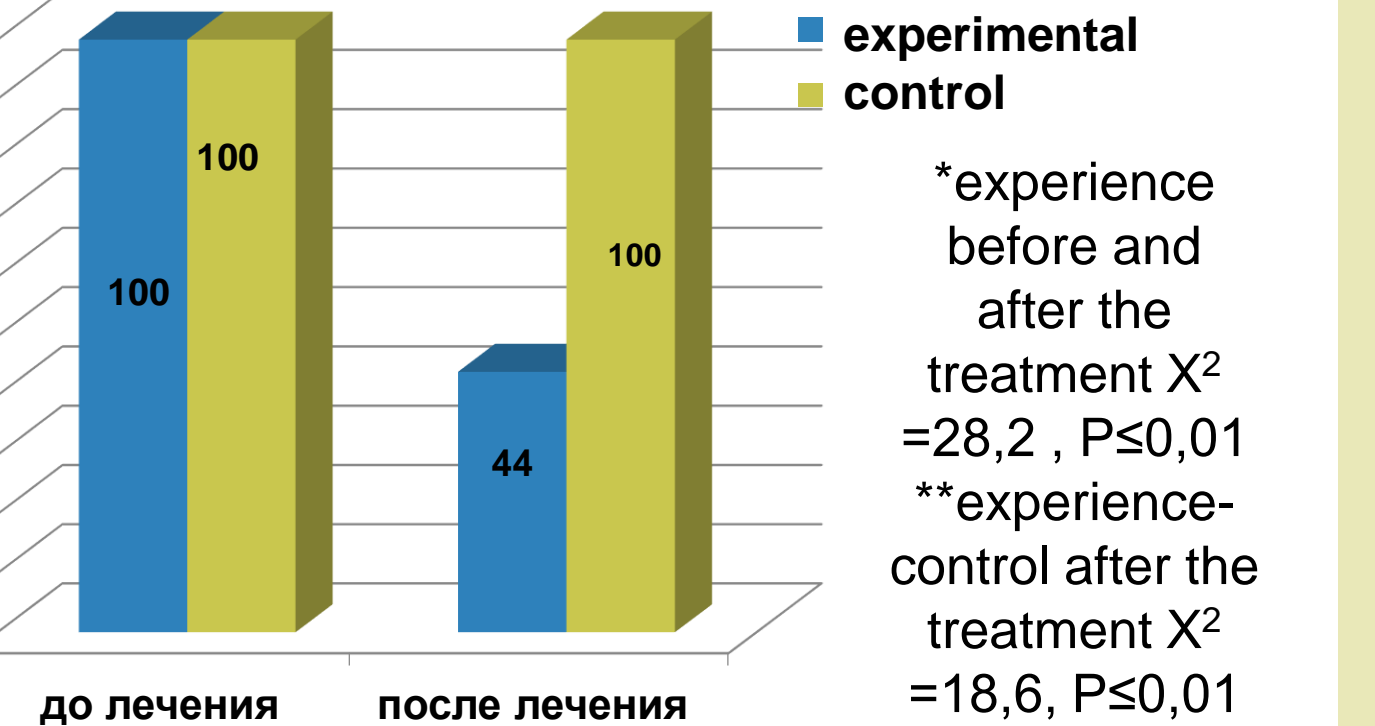
Dynamics of intensity of biomechanical SDs of the head region



Structure of dominant SDs in children from the main group after the treatment



Dynamics of the incidence in % of the biomechanical SD of the head region



Comparison of the results in the main group before and after the treatment X²=10,6, P<0,01

*experience before and after the treatment X²=28,2, P<0,01
**experience-control after the treatment X²=18,6, P<0,01

Conclusion

- The proposed methodology:
- develops Still's idea that osteopathy is a science,
 - provides a basis for standardization of training of osteopaths,
 - allows osteopathy to take its place among other medical specialties,
 - allows clinical research to be conducted in accordance with the principles of evidence-based medicine,
 - contributes to the fruitful collaboration of osteopaths from different schools and countries.