Results of Osteopathic Treatment of Patients with Paroxysmal Atrial Fibrillation

Anastasia Tabina, MD, PhD\textsuperscript{1,2}, Ekaterina Leleka, MD\textsuperscript{1,2}, Dr. Kirill Mazalskiy, MD\textsuperscript{1}

\textsuperscript{1}Clinic of Osteopathy and Classic Medicine Osteopolyclinic, Bol’shaya Tatarskaya str., 7-4, Moscow, Russia

\textsuperscript{2}Institute of Osteopathy, Degtyarnaya str., 1A, St. Petersburg, Russia

Atrial fibrillation (AF) is one of the most widespread arrhythmia in the world. The main cause of AF is structural heart diseases and hypertension, which lead to the structural remodeling of atrial tissue. However, the symptom burden of AF doesn't correlate with degree of atrial remodeling.

HYPOTHESIS
The initiation of AF starts from a source in pulmonary veins (1). The ablation of this source can suppress recurrent AF (2). This region of pulmonary veins is the place of tight attachment of the connective tissue of pericardium. The pericardium is fixed in thorax with ligaments which can spread the tension from different organs to the pericardium (3). We suggest that dysfunctions of other organs can affect pulmonary veins by tension of connective tissue of ligament and pericardium, and cause the trigger activation of arrhythmia. We expect that osteopathic treatment can reduce the symptoms of AF.

METHODS
The study included 30 patients (mean age 54.37±12.29 years) with non-valvular paroxysmal AF. All of them were on suitable antiarythmic therapy. Patients have been randomized into 2 groups. 1st group (15 patients) was receiving osteopathic treatment while the 2nd one got only standard treatment. Osteopathic treatment included structural, visceral and cranial techniques and was based on patient's individual somatic dysfunctions (SD). All patients have undergone osteopathic examination to assess the structure of SD according to Russian standard protocol. The examinations also included assessment of quality of life by questionnaire SF-36, and «questionnaire for patients with arrhythmia», 24-hour-ECG monitoring and echocardiography. The assessments were made before and in 3 month after commencing of treatment.

RESULTS
All patients with AF had somatic dysfunctions of thorax. In 1st group the number of SD of thorax region decreased from 5.45±1.63 to 3.00±2.16 (p=0.0336) after treatment. Osteopathic treatment led to improvement of quality of life (p=0.0019), reduction of paroxysms of AF and number of atrial extrasystoles (p=0.01). Patients
with AF without hypertension (p=0,024) and with abdominal SD got more advantage from osteopathic treatment.

CONCLUSION
Osteopathic treatment is a good additional support for patients with paroxysmal AF, which can be helpful for prevention of paroxysms of AF, decreasing symptoms and improvement quality of life.

REFERENCES