



Presentation of the Kyrgyz Society of Cardiology

The Kyrgyz Electrophysiology Working group is a specialized association which provides treatment of Arrhythmias and annual conference “School of Arrhythmology” within the Kyrgyz Cardiac Society.

Organization:

The Kyrgyz Electrophysiology Working group consists of the following members: Prof. Erkin Mirrakhimov (president of the Kyrgyz Society of Cardiology), PhD Abai Turdubaev, PhD Kurban Kalysov, PhD Damir Osmonov, Aydin Saparbaev

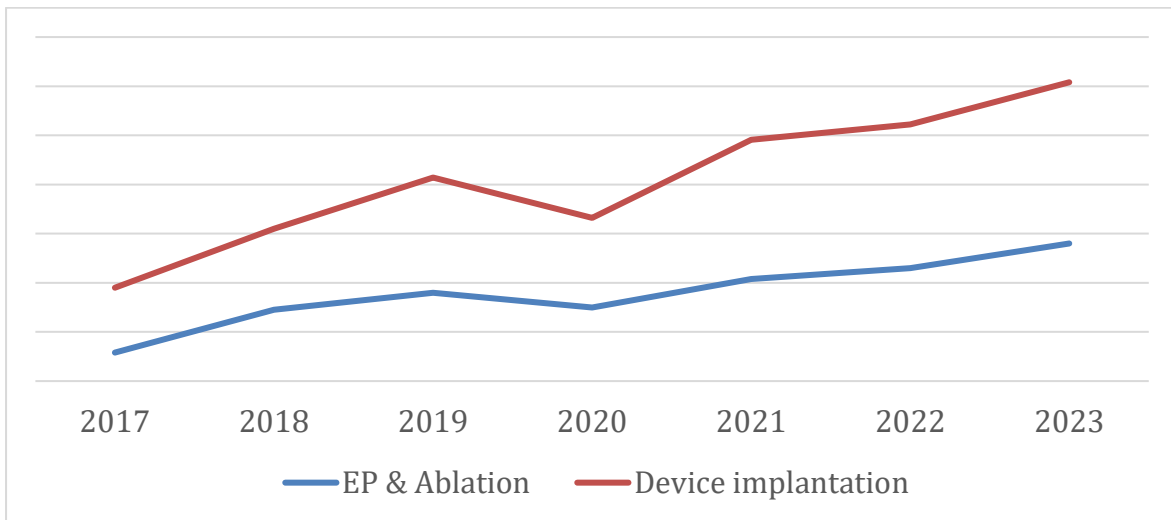
- The Kyrgyz Electrophysiology Working group starts active work from 2017 under the contribution of president of the Kyrgyz Society of Cardiology professor Erkin Mirrahimov.
- From 2018, the first annual international conference “School of Arrhythmology” was organized with the participation of prof. Philipp Sommer, prof. Evgenyi Pokushalov, Evgenyi Lyan, prof. Ayan Abdrakhmanov, Aleksey Sergeev, Roin Rekvava. Since then, this conference has become a tradition and is held every year.
- Today in Kyrgyz Republic 13 Cathlab (public & private) provides diagnostic EP procedures, catheter ablation of supraventricular tachycardias (SVT), ablation of ventricular arrhythmias (VT), atrial fibrillation ablation (Afib) and device implantation (pacemakers, CRT-P & CRT-D).
- We have 3 EP and 12 CIED operators who work in public and private hospitals. In the whole country we have 8 EP fellows.



The number of hospitals, private or public, undertaking electrophysiology procedures for diagnostic EP studies, ablations and implanting devices



Total number of procedures in Kyrgyz Republic





EHRA

European Heart
Rhythm Association

Our **main goal** is to provide a quality help for patients with Arrhythmias in Kyrgyz Republic.

Education

We have 3 centers where we train our residents in EP field and device implantation. Moreover, our specialists and residents take part in workshops, and HRS and EHRA congresses each year.

National meetings

Every year we have a Cardiology Congress which provides a joint session with EHRA.

From 2018 to provide education in Arrhythmology filed for our cardiologists we organized annual conference "School of Arrhythmology". This year it will be 7-th School of Arrhythmology.

Collaboration

- Contribution to EHRA committees EHRA National Cardiac Societies committee member
- Contribution to EHRA Young EP Community
- Joint session with "Silk Road" heart rhythm society



Development of Arrhythmology in Kyrgyzstan

Introduction

Kyrgyzstan, a country located in Central Asia, has been making significant strides in the field of cardiology, particularly in arrhythmology. With a population of over 7 million people, the healthcare system in Kyrgyzstan has been evolving to meet the needs of its citizens, especially in the treatment of cardiac arrhythmias. Over the past few decades, the country has seen substantial advancements in medical technology and practices, which have greatly improved the diagnosis and treatment of heart rhythm disorders.

Historical Background

The development of arrhythmology in Kyrgyzstan began with the introduction of basic diagnostic and treatment methods for arrhythmias. Over time, medical institutions started adopting more complex procedures, including radiofrequency ablation (RFA) and the implantation of pacemakers. These advancements were crucial in laying the foundation for modern arrhythmological practices in the country. Now we have 13 (2 public and 11 private) centers working on the field of interventional arrhythmology (InA). The 1st public hospital which introduced InA was National Center of Cardiology and Internal Disease (head of arrhythmology department – Kurban Kalysov) and then Scientific Research Institute of Heart Surgery and Organ Transplantation (head of arrhythmology department – Abai Turdubaev)

(Scientific Research Institute of Heart Surgery and Organ Transplantation)

Achievements and Innovations

For the first time in Kyrgyzstan, at National Center of Cardiology and Internal Disease Dr. Kalysov K.A. performed and introduced into practice the following procedures:

- RFA with the use of three-dimensional navigation.
- RFA without the use of X-ray radiation (“zero-fluoro”).
- Substrate RFA in patients with post-infarction ventricular tachycardia.
- Implantation of a His bundle lead for permanent pacing in patients with low left ventricular ejection fraction (LVEF).
- Left bundle branch pacing for resynchronization therapy in patients with low LVEF.
- Implantation of a His bundle lead in patients with “pacemaker-induced cardiomyopathy.”
- Cardioneuroablation in patients with sick sinus syndrome and atrioventricular block.

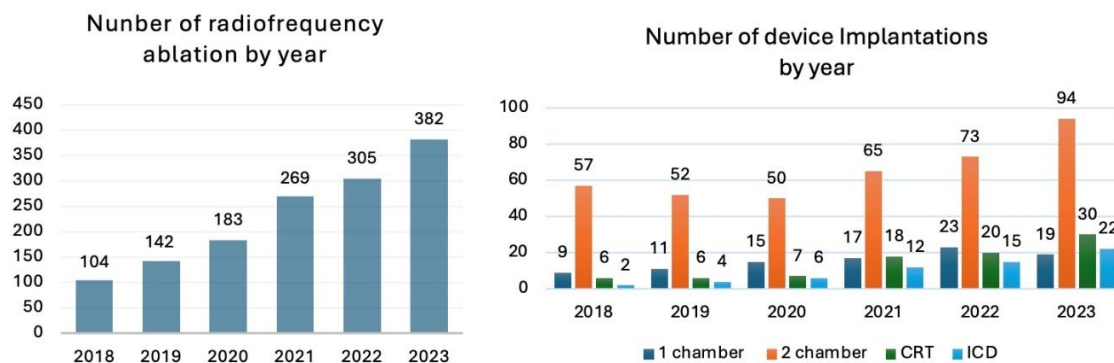




- Cryoablation for the treatment of atrial fibrillation.
- RFA of WPW syndrome and ventricular tachycardia during pregnancy.
- Intra-operative RFA of post-infarction ventricular tachycardia.
- RFA of left atrial flutter in patients with a mitral valve prosthesis.
- Implantation of a loop recorder (Reveal XT).
- Alcohol ablation of the vein of Marshall.

Statistics and Indicators

Number of Pacemaker Implantations by Year:



These statistics demonstrate a significant increase in the use of advanced arrhythmia treatment methods in Kyrgyzstan, reflecting the growth and development of the field.

Education and Collaboration

Education and training are key priorities in the development of arrhythmology in Kyrgyzstan. Regular educational events, including master classes and symposiums with participation from leading international experts, are organized to enhance the skills and knowledge of local specialists. Kyrgyz doctors actively participate in international congresses and internships, ensuring they stay updated with the latest advancements in the field.

Challenges and Future Directions

Despite the significant progress, there are challenges that the field of arrhythmology in Kyrgyzstan continues to face. These include the need for more specialized training programs and the integration of cutting-edge technology into routine practice. Efforts



are ongoing to address these challenges through enhanced collaboration with international medical communities and continuous professional development for healthcare providers.

Key Contributions

Several key contributions have been made to the field of arrhythmology in Kyrgyzstan, including:

- The introduction of non-fluoroscopic mapping systems, reducing the exposure to radiation for both patients and medical staff.
- The establishment of specialized training programs for young electrophysiologists.
- Participation in international research projects and registries, contributing to the global body of knowledge on arrhythmias and their management.

Conclusion

The development of arrhythmology in Kyrgyzstan has been marked by significant achievements and innovations, thanks to the dedicated efforts of healthcare professionals and the adoption of modern technologies. Continued focus on education, research, and international collaboration will further enhance the quality of care for patients with cardiac arrhythmias in Kyrgyzstan. The future looks promising as the country continues to build on its successes and address the challenges ahead.