



First Experience of Cardiac Device Implantation with Remote Cardiac Support System in Turkey

Gökay Taylan^{ID}, Murat Gök^{ID}, Uğur Özkan^{ID}, Servet Altay^{ID}, Kenan Yalta^{ID}

Department of Cardiology, Faculty of Medicine Trakya University, Edirne, Turkey

To the Editor,

A remote cardiac support system (RCSS) has been recently suggested as a novel technology primarily used in cardiac device implantation and electrophysiological study.¹ In this system, an encrypted connection over the internet is established between the health staff using smart glasses and a technician in the pacemaker company center. Implantation and programming of pacemakers can be performed quickly through RCSS, owing to its significant potential to offer high-resolution images. Therefore, harnessing this system might potentially eliminate any hindrance associated with external circumstances, such as transportation and climate conditions, leading to the timely initiation of interventional procedures. Moreover, as a cost-effective strategy, it might reduce hospitalization and transportation expenses and, consequently, might potentially lead to the improvement of other medical facilities including hospital pacemaker supply, etc.

In this context, we have successfully performed the first intervention via RCSS in our university hospital where pacemaker implantations have been performed quite often. On the contrary, our center is located relatively remote from pacemaker companies, potentially indicating a greater need for such systems. Within 1 day, three interventions (1 dual-chamber rate-modulated pacemaker, 1 single-chamber implantable cardioverter-defibrillator, and 1 cardiac resynchronization therapy defibrillator implantation) were performed using smart glasses and programming in our center (Figure 1). Communication with standard internet speed of >10 MPS wireless was fully provided. Importantly, no negative feedback was heard from the operators and patients. Specifically, patients were highly satisfied with the rapid treatment planning. In this regard, we expect RCSS to become a widely recognized phenomenon in our country because of its significant advantages.

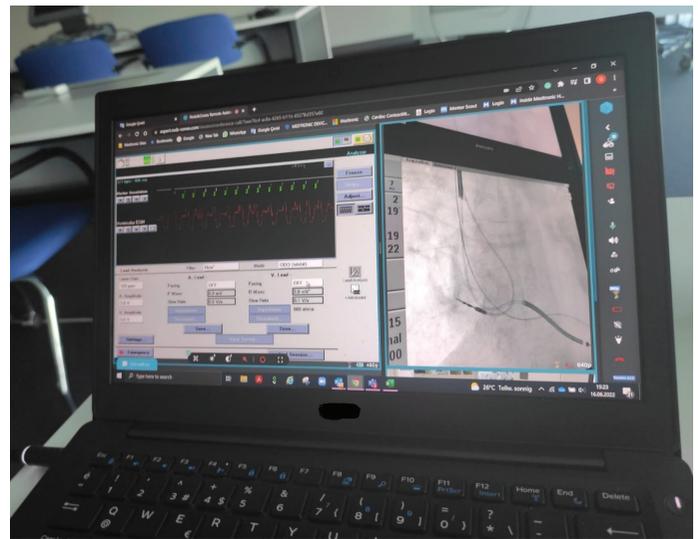


FIG. 1. An image taken during the procedure from the technician's computer in the Remote Cardiac Support System Center [The technician in the center monitors both the operation of the operator (right) and the movements of the our nurse/technician who perform the programming on the programmer (left)].

Author Contributions: Concept – G.T., M.G.; Design – G.T., M.G.; Data Collection or Processing – U.Ö., S.A., K.Y.

Conflict of Interest: No conflict of interest was declared by the authors.

Funding: The authors declared that this study received no financial support.

REFERENCES

1. Siddamsetti S, Shinn A, Gautam S. Remote programming of cardiac implantable electronic devices: A novel approach to program cardiac devices for magnetic resonance imaging. *J Cardiovasc Electrophysiol.* 2022;33:1005-9.



Corresponding author: Gökay Taylan, Department of Cardiology, Faculty of Medicine Trakya University, Edirne, Turkey
e-mail: taylan1091@hotmail.com

Received: July 05, 2022 Accepted: August 26, 2022 Available Online Date: September 09, 2022 • DOI: 10.4274/balkanmedj.galenos.2022.2022-7-16

Available at www.balkanmedicaljournal.org

ORCID iDs of the authors: G.T. 0000-0002-7015-4537; M.G. 0000-0003-3118-9064; U.Ö. 0000-0002-7552-7654; S.A. 0000-0001-7112-3970; K.Y. 0000-0001-5966-2488.

Cite this article as:

Taylan G, Gök M, Özkan U, Altay S, Yalta K. First Experience of Cardiac Device Implantation with Remote Cardiac Support System in Turkey. *Balkan Med J.*; 2022; 39(5):383.

Copyright@Author(s) - Available online at <http://balkanmedicaljournal.org/>