CARDIAC ARRHYTHMIAS

STATUS OF ABLATION OF CARDIAC ARRHYTHMIAS IN LEBANON

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ABSTRACT • Objectives: The 2017 European Heart Rhythm Association (EHRA) White Book was published with interventional electrophysiology data on ESC member countries. Lebanon, an ESC member country, did not have data on cardiac ablation. Hence, there was an unmet need to have cardiac ablation estimate in Lebanon. Methods: Data from companies providing support for cardiac ablation in Lebanon was collected for the year 2017. Results: In 2017, the number of catheter ablations performed was close to 350. This is around 70 per million of Lebanese. There has been a significant increase, over 50%, in the 2010-2017 period: 50 to 60 ablation procedures were performed annually in 2010 (most of them for supraventricular tachycardias) and this increased to around 100 per year in 2013. Conclusion: Cardiac ablation procedures have increased over the last several years in Lebanon in parallel with the number of cardiac electrophysiologists. It is important to have a national registry of cardiac ablations in Lebanon which will require financial support for its maintenance.

Keywords: ablation; radiofrequency; cryoablation; cardiac arrhythmias

INTRODUCTION

Ablation procedures of cardiac arrhythmias aim to eliminate the trigger or alter/eliminate the arrhythmogenic substrate in the atria or ventricles.

Data on cardiac ablation in Lebanon is lacking. The 2017 European Heart Rhythm Association (EHRA) White Book was published with interventional electrophysiology data on the European Society of Cardiology (ESC) member countries [1].

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RÉSUMÉ • Objectifs: Le livre blanc 2017 de l'European Rhythm Association (EHRA) a été publié avec des données d'électrophysiologie interventionnelle dans les pays membres de la Société européenne de cardiologie (SEC). Le Liban, pays membre de la SEC, ne disposait pas de données sur l'ablation cardiaque. Il y avait donc un besoin non satisfait d'avoir une estimation de l'ablation cardiaque au Liban. Méthodes: Les données des entreprises fournissant une assistance pour l'ablation cardiaque au Liban ont été collectées pour l'année 2017. Résultats: En 2017, le nombre d'ablations par cathéter réalisées était proche de 350. Cela représente environ 70 par million de Libanais. Il y a eu une augmentation significative de plus de 50% sur la période 2010-2017: 50 à 60 procédures d'ablation ont été effectuées chaque année en 2010 (la plupart pour des tachycardies supraventriculaires) et ont augmenté pour atteindre environ 100 par an en 2013. Conclusion: Les procédures d'ablation cardiague ont augmenté au cours des dernières années au Liban, et connu une croissance liée au nombre de rythmoloques. Il est important de disposer d'un registre national des ablations cardiaques au Liban, ce qui nécessitera un soutien financier pour son maintien.

Mots-clés: ablation; radiofréquence; cryoablation; arythmies cardiaques

Lebanon, a non-European ESC member country, did not have data on cardiac ablation procedures [1]. Hence, there was an unmet need to have data estimate of cardiac ablation in Lebanon.

METHODS

Data from companies (Abbott and Biosense Webster) providing support for ablation procedures in Lebanon was collected for the year 2017.

RESULTS

In 2017, the number of catheter ablations performed was close to 350. This is around 70 per million of Lebanese. There has been a significant increase greater than 50% in the 2010-2017 period: 50 to 60 ablation procedures were performed annually in 2010 (the majority for supraventricular tachycardias) and this increased to around 100 per year in 2013 (Figure 1).

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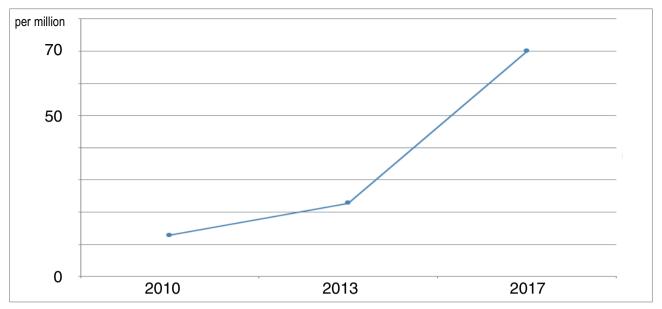


Figure 1. Temporal trend of cardiac ablation procedures per million of Lebanese

DISCUSSION

This study fills an unmet need and fills the gap of providing recent data on cardiac ablations in Lebanon. The 2017 EHRA White Book was published with CIED data on ESC member countries with no data on Lebanon. Lebanon, an ESC member country did not have data in the 2017 EHRA White Book [1]. Hence, there was an unmet need to have CIED data estimate in Lebanon. Our study shows a rise in cardiac ablations in Lebanon since 2010.

According to Refaat *et al.*, 50 to 60 ablation procedures were performed on average annually in Lebanon in 2010 [2]. Cardiac ablations increased to around 100 in 2013 [3]. Most of those performed cases are supraventricular tachycardias (atrioventricular nodal reentrant tachycardia and atrioventricular reentrant tachycardia including Wolff-Parkinson-White syndrome). Since 2010 and up to 2017, there has been a surge in catheter ablation procedures reaching around 70 per million Lebanese in 2017. The cardiac ablation procedures have increased over the last several years in Lebanon along with the number of cardiac electrophysiologists to around 20 [4].

There are several challenges to the development of electrophysiology in Lebanon. Most notably is the absence of a national perspective and governmental policies to improve the practice in Lebanon. Another major hurdle that faces the growth of the field in Lebanon is the issue of reimbursement. Around 75% of the population is covered by public insurance, 10% by private insurance, and 15% are not insured. Some of the electrophysiology catheters are not reimbursed.

Finally, there is an issue of public awareness regard-

ing cardiac ablations which the Lebanese Society of Cardiology Electrophysiology and Pacing Working Group tried to address. There is a need to have a national cardiac ablation registry.

This study has a limitation which is lack of capture of cardiac ablation procedures that did not have company support.

CONCLUSIONS

Cardiac ablation procedures have increased over the last several years in Lebanon in parallel with the number of cardiac electrophysiologists. It is important to have a national registry of cardiac ablations in Lebanon which will require financial support for its maintenance.

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