

Quality of life in patients with paroxysmal atrial fibrillation after circumferential pulmonary vein ablation

Iwona M. Woźniak-Skowerska¹, Mariusz J. Skowerski², Andrzej Hoffmann¹, Seweryn Nowak¹, Maciej Faryan¹, Jarosław Kolasa¹, Tomasz Skowerski³, Krzysztof Szydło¹, Anna Maria Wnuk-Wojnar¹, Katarzyna Mizia-Stec¹

¹1st Department of Cardiology, Medical University of Silesia, Upper Silesian Medical Centre, Katowice, Poland

²Department of Cardiology, School of Health Sciences, Medical University of Silesia, Katowice, Poland

³2nd Department of Cardiology, Medical University of Silesia, Upper Silesian Medical Centre, Katowice, Poland

Abstract

Background: Atrial fibrillation (AF) is the most common arrhythmia and is associated with a deterioration of quality of life (QoL). Catheter ablation is a therapeutic strategy for some patients with AF. The effectiveness of pulmonary vein isolation is still under assessment.

Aim: To assess the long-term influence of circumferential pulmonary vein ablation (CPVA) on QoL in patients with AF.

Methods: The study population consisted of 33 patients (26 males, age 54.2 ± 9 years) with highly symptomatic (EHRA II–III) drug refractory paroxysmal AF, who underwent CPVA. A clinical examination, electrocardiogram (ECG), and Holter ECG were performed before and during a one-year follow-up. The SF-36 Medical Outcomes Survey Short-Form QoL questionnaire, scored on a 0–100 scale for each of eight domains: bodily pain (BP), general health (GH), mental health (MH), physical functioning (PF), role-emotional (RE), role-physical (RP), social functioning (SF), and vitality (V), was collected before and one year after CPVA.

Results: In the one-year follow-up 27 (82%) patients were free of AF. EHRA symptoms were improved one-year after CPVA regardless of CPVA efficacy. After the follow-up the SF-36 questionnaire results improved significantly in all of the subscales in patients without a recurrence of AF after CPVA. In subjects with a recurrence of AF, all of the subscales did not indicate any statistically significant differences. There was an association between the CPVA and the following QoL domains: GH ($p = 0.018$), PF ($p = 0.042$), and V ($p = 0.041$). The highest values of the GH and V domains were found in the non-recurrence patients one year after CPVA.

Conclusions: CPVA results in the clinical improvement of patients with symptomatic AF regardless of the final arrhythmia termination. Patients after successful CPVA experienced a significant improvement in all of the subscales of the QoL.

Key words: atrial fibrillation, pulmonary vein isolation, quality of life

Kardiol Pol 2016; 74, 3: 244–250

INTRODUCTION

Atrial fibrillation (AF) is a common heart arrhythmia, which occurs frequently in the general population with an increasing prevalence that is associated with age. It is well known that AF impairs the quality of life (QoL), which is manifested as a sensation of irregularity of heartbeat, and decreased exercise tolerance and social functioning. AF is associated

with a higher frequency of emergency room admissions, hospitalisations, and side effects of the medications that are used to treat the arrhythmia. The evaluation of QoL in patients with paroxysmal, symptomatic AF is an increasingly important aim [1–4]. The SF-36 questionnaire has been proven to assess the patient's own perception of his/her state of health with satisfactory accuracy [5]. Recently, pulmonary vein isolation

Address for correspondence:

Iwona M. Woźniak-Skowerska, MD, PhD, 1st Department of Cardiology, School of Medicine, Medical University of Silesia, ul. Ziołowa 47, 40–635 Katowice, Poland, e-mail: iskowerska@hoga.pl

Received: 22.02.2015

Accepted: 30.06.2015

Available as AOP: 19.08.2015

Kardiologia Polska Copyright © Polskie Towarzystwo Kardiologiczne 2016

(PVI) has become a widely used method for AF treatment [6]. The safety and effectiveness of PVI in patients with AF is still under intensive clinical investigation [3, 4, 7]. A previous report [8] on the outcome of the radiofrequency catheter ablation performed in patients with extremely symptomatic premature ventricular contractions suggested that the procedure significantly improves the QoL as well. It could be expected that PVI may be an intervention as a method of treatment of patients with symptomatic AF, which might lead to an improvement in the patient's well-being and QoL, and a reduction in utilisation of health-care resources.

The aim of this study was to determine the long-term influence of circumferential pulmonary vein ablation (CPVA) on QoL using the SF-36 questionnaire in highly symptomatic patients with drug refractory AF, and to compare the results obtained from SF-36 score in patients with and without a recurrence of AF after CPVA.

METHODS

Study population

The study population consisted of 33 consecutive patients (26 males, mean age 54.2 ± 9 years, range 24–62 years) with highly symptomatic (EHRA II–III) drug refractory paroxysmal nonvalvular AF, who were referred to our department for CPVA using a three-dimensional (3D) mapping system. The episodes of AF in all of the patients were documented using a Holter electrocardiogram (ECG) and/or surface ECG before the procedure. The treatment with two or more anti-

arrhythmic drugs was unsuccessful, and the patients were often admitted to the outpatient clinics and/or hospitalised. In some patients, electrical cardioversions were performed due to persistent AF episodes. The baseline demographic and clinical characteristics of the study population are presented in Table 1. Before and after CPVA all of the patients received oral anticoagulation for at least six weeks, and the international normalised ratio was maintained between two and three. The following exclusion criteria were used in the study: persistent or permanent AF, valvular AF, unstable angina, and moderate and severe systemic hypertension.

CPVA procedure

The CPVA procedure using a 3D mapping system was done according to the Pappone technique [9]. Circular left atrial linear lesions were created in the left atrium around the ostia of the pulmonary veins using a 3D mapping system. The CPVA procedure was performed using a 3D CARTO mapping system. The mapping/ablation catheter (Navistar Thermocool) was introduced to the left atrium via the transseptal access. An electroanatomical map of the left atrium and pulmonary veins was performed. Subsequently, it was merged with a computed tomography reconstruction of the left atrium that had previously been done. Circular left atrial linear lesions around the ostia of the pulmonary veins were created. After ablation a second electroanatomical voltage map was done. If low voltage areas appeared inside the lines and no captured stimulation was obtained from these regions, the veins were

Table 1. The baseline demographic and clinical characteristics of the study population

	All patients (n = 33)	NR group (n = 27)	R group (n = 6)
Age [years]	54.2 ± 9	54.2 ± 9	54.9 ± 9
Sex (male / female)	26 / 7	23 / 4	3 / 3
AF episodes in history [years]	2–14	2–6	2–14
AF frequency (episodes/month)	4–15 range (7 mean)	4–6 range (3 mean)	4–15 range (7 mean)
AAD treatment (number)	1–3 range (2.6 mean)	1–3 range (1.6 mean)	2–3 range (2.4 mean)
Cardioversion in history (number)	1–9 range (2.6 mean)	1–6 range (2.2 mean)	2–9 range (2.6 mean)
Hypertension (n / %)	20 / 60%	14 / 52%	6 / 100%
CHA ₂ DS ₂ VASC score	0–3 range (1.9 mean)	0–2 range (1.6 mean)	1–3 range (1.9 mean)
TTE:			
LVEF (%)	50–60%	54–60%	50–55%
IVS > 12 mm (n / %)	6 / 18%	2 / 8%	4 / 67%
LA > 40 mm (n / %)	5 / 15%	2 / 8%	3 / 50%
EHRA I/II/III/IV (n / %):			
Before	n: 0 / 22 / 11 / 0 %: 0 / 67 / 33 / 0	n: 0 / 21 / 6 / 0 %: 0 / 78 / 22 / 0	n: 0 / 1 / 5 / 0 %: 0 / 17 / 83 / 0
One-year after CPVA	n: 28 / 5 / 0 / 0 %: 82 / 18 / 0 / 0	n: 27 / 0 / 0 / 0 %: 100 / 0 / 0 / 0	n: 1 / 5 / 0 / 0 %: 17 / 83 / 0 / 0

AAD — antiarrhythmic drugs; AF — atrial fibrillation; CPVA — circumferential pulmonary vein ablation; IVS — intraventricular septum; LA — left atrium; LVEF — left ventricular ejection fraction; NR — non-recurrence group, R — recurrence group; TTE — transthoracic echocardiography

treated as isolated (procedure end-point). To reduce the risk of left atrial macroreentry tachycardia, no additional lines in the left atrium were done. Each patient underwent only one ablation procedure. No early or late complications after CPVA procedure were observed.

Follow-up

Outpatient follow-up visits were scheduled regularly every three months up to one year after the ablation. Long-term efficacy was assessed clinically on the basis of clinical symptoms, the ECG, and a seven-day 24-h Holter recording (performed one year after CPVA). Some of the patients (10 patients) used an “event recorder”. The recurrence of AF was defined as a documented AF episode of at least 30 s duration.

QoL assessment

The SF-36 questionnaire, when used as a generic health scale, measures several health domains, including eight variables: bodily pain (BP), general health perception (GH), mental health (MH), physical functioning (PF), social functioning (SF), role limitations related to emotional problems (RE), role-physical (RP), and vitality perceptions (V). The scores range from 0 (indicating the worse health status) to 100 (indicating the best health status). The patients completed the SF-36 questionnaire at the baseline and one year after CPVA. The scores were calculated within the range of 0–100. The EHRA scale was handed out at the same time as the SF-36 questionnaire.

Statistical analysis

The baseline clinical parameters and the results of ancillary investigations were compared using the two-sample t-tests for normally distributed continuous variables (Student's t-test); in the case of an abnormal distribution, the Mann-Whitney U test was used. Categorical variables were compared using the χ^2 test. All of the text and table results are expressed as means \pm standard deviation (SD) or a number (percentage). To compare the change in QoL domain values over time, the data were analysed as a repeated measure analysis of variances, taking into account the recurrence of AF, the intervention factor (CPVA), and time. A value $p < 0.05$ was considered statistically significant.

RESULTS

Clinical results of CPVA

After CPVA 27 (82%) patients were free of documented AF (non-recurrence group — NR group). Twenty-two of them (81%) were still being treated with beta-blockers, mostly due to mild hypertension. Seventeen (62%) patients were treated with antiarrhythmic drugs; mainly with propafenone — 14 (83%) patients and sotalol — three (17%) patients. They tended to use the drugs occasionally when they needed them (self-diagnosed palpitations) as a “pill in the pocket” strategy. They took the medicine very quickly when they felt only short

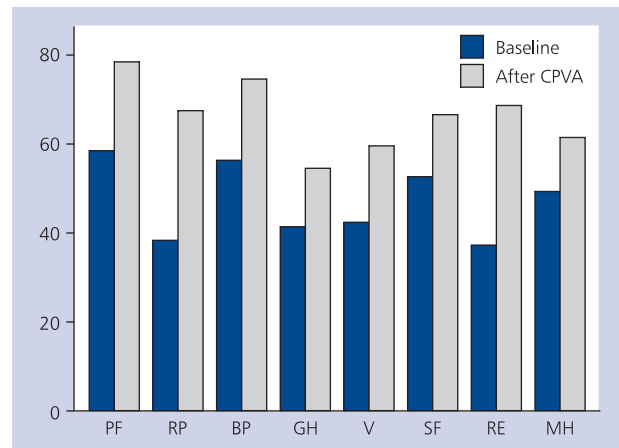


Figure 1. Results of the SF-36 questionnaire in patients without a recurrence of atrial fibrillation (non-recurrence group) after circumferential pulmonary vein ablation (CPVA); $p < 0.05$; abbreviations as in Table 2

palpitations, which in fact were diagnosed in the seven-day Holter ECG and event recorder reports as extra systoles.

Six (18%) patients had documented episodes of AF (recurrence group — R group). Similarly, five (83%) patients were treated with beta-blockers, five (83%) patients with propafenone, and one (17%) patient with sotalol. None of the patients received amiodarone.

All of the patients continued anticoagulation therapy with acenocoumarol.

EHRA classification

CPVA improved the clinical status of the patients. Before CPVA, EHRA symptoms were present in 22 (67%) patients — class II, and in 11 (33%) patients — class III. One year after CPVA, the symptoms were as follows: 28 (82%) patients — class I; five (18%) patients — class II; zero (0%) patients — class III. The improvement in EHRA was observed in both the NR and R groups — data are presented in Table 1.

QoL before and after CPVA

Before ablation, all of the patients reported lower than expected results in all eight categories of the SF-36 scores (Fig. 1).

CPVA improved the results of the QoL assessments of all the subjects (Table 2).

After the follow-up the SF-36 questionnaire results improved significantly in all of the domains in the NR group (Table 3). The greatest improvements were noticed in the PF (34% improvement), RE (46% improvement), RP (79% improvement), and V (30% improvement) domains.

In the R group none of the domains showed statistically significant differences. Figures 1 and 2 illustrate the changes in eight domains in the patients without and with AF recurrence, respectively.

Table 2. Comparison of the quality of life domains in the study population (baseline vs. one year after CPVA)

	Mean	SD	Difference	SD difference	P
BP before	54.6	26.4			
BP one year after	72.0	23.8	-17.4	21.8	0.0000
GH before	40.2	14.4			
GH one year after	57.1	20.2	-16.9	21.2	0.0001
MH before	47.8	18.9			
MH one year after	61.1	20.7	-13.3	22.4	0.0017
PF before	55.3	28.0			
PF one year after	75.5	25.2	-20.2	21.7	0.0000
RE before	4.06	1.06			
RE one year after	5.09	1.31	-1.03	1.13	0.0000
RP before	5.45	1.72			
RP one year after	6.73	1.48	-1.27	1.66	0.0001
SF before	6.09	1.77			
SF one year after	7.30	1.67	-1.21	1.96	0.0012
V before	12.42	3.56			
V one year after	15.67	3.68	-3.24	3.46	0.0000

BP — bodily pain; CPVA — circumferential pulmonary vein ablation; GH — general health; MH — mental health; PF — physical functioning; RE — role-emotional; RP — role-physical; SD — standard deviation; SF — social functioning; V — vitality

Table 3. The quality of life domains obtained baseline and one year after CPVA in the non-recurrence group

	Mean	SD	Difference	SD difference	P
BP before	52.9	26.4			
BP one year after	72.3	25.1	-19.3148	22.5658	0.0001
GH before	41.0	15.7			
GH one year after	59.9	21.1	-18.9630	22.7384	0.0002
MH before	47.4	19.9			
MH one year after	63.0	21.8	-15.5556	23.4116	0.0019
PF before	52.0	26.7			
PF one year after	74.6	24.7	-22.5926	21.0937	0.0000
RE before	3.89	0.97			
RE one year after	5.15	1.38	-1.2593	1.0595	0.0000
RP before	5.37	1.71			
RP one year after	6.81	1.52	-1.4444	1.6013	0.0000
SF before	6.00	1.80			
SF one year after	7.44	1.74	-1.4444	1.9282	0.0006
V before	12.18	3.77			
V one year after	15.89	3.92	-3.7037	3.3491	0.0000

Abbreviations as in Table 2

ANOVA analysis

The ANOVA analysis did not reveal a statistically significant association of the QoL domains and the group or the interaction of the group (NR group vs. R group) and intervention (before vs. one year after CPVA).

There was an association between the intervention and the following QoL domains: GH ($p = 0.018$), PF ($p = 0.042$), and V ($p = 0.041$). The highest values of GH and V domains were found in the NR group one year after CPVA (Table 4).

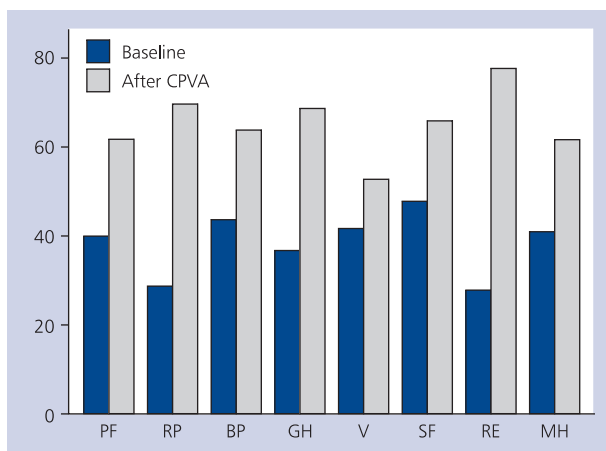


Figure 2. Results of the SF-36 questionnaire in patients who had a recurrence of atrial fibrillation after circumferential pulmonary vein ablation (CPVA); $p < 0.05$ for bodily pain (BP) and general health (GH); abbreviations as in Table 2

DISCUSSION

In the prospective study, we evaluated the QoL in patients with paroxysmal, nonvalvular AF, who were undergoing CPVA. After CPVA 82% of patients were free from recurrence of arrhythmia and reported an improvement of QoL. Patients after successful CPVA, especially, experienced a significant benefit in QoL. Unsuccessful CPVA also eliminated some symptoms of AF and improved the clinical status of the patients.

Previous studies have shown that the SF-36 questionnaire is an appropriate tool for a QoL assessment in patients with cardiac disorders [8, 10, 11]. It is well known that the prevalence of AF is more frequent in elderly patients, with the range of sensitivity of arrhythmia from asymptomatic to symptomatic, which is associated with underlying cardiac diseases. The population that was studied in this research was relatively young (54.2 ± 9 years) and had not experienced significant symptoms of other co-morbid health conditions that may have had an impact on the SF-36 questionnaire results. The effect of the therapy that was applied on health-related QoL in patients with AF has been investigated in several studies [7, 12, 13], and these data are consistent with our findings.

It should be noted that our study population, who had been diagnosed with AF before CPVA, was characterised by a poor level of QoL.

The results are consistent and describe a health-related improvement of the QoL in patients with highly symptomatic drug-resistant AF after CPVA [7, 12, 13]. Eighteen per cent of the patients had documented episodes of AF after CPVA (R group); however, their symptoms were limited. Thus, it has been suggested that the ablation procedure can modulate the feeling of arrhythmia without entirely curing it. Similarly, data reported by Berkowitsch et al. [12] about the QoL outcomes in patients with paroxysmal AF after ablation indicated that the improvement in patients with a recurrence of AF may be caused by a modification of the underlying arrhythmogenic

Table 4. ANOVA analysis

QoL domains	R group		NR group		P value		
	Before CPVA	One-year after CPVA	Before CPVA	One-year after CPVA	Source of variance		
					G	I	GxI
BP	62.0 ± 27.0 Median 68	70.8 ± 19.2 Median 74	52.9 ± 26.4 Median 45	63.3 ± 25.1 Median 74	0.6397	0.0876	0.5205
GH	36.5 ± 4.2 Median 36	44.3 ± 6.8 Median 43.5	41.0 ± 15.7 Median 35	59.9 ± 21.1 Median 57	0.0725	0.018	0.3146
MH	49.3 ± 15.3 Median 52	52.7 ± 13.0 Median 50	47.4 ± 19.9 Median 44	63.0 ± 21.8 Median 72	0.5135	0.1431	0.3409
PF	65.0 ± 41.7 Median 87.5	79.2 ± 29.6 Median 87.5	52.0 ± 26.7 Median 50	74.6 ± 24.7 Median 85	0.3257	0.042	0.3409
RE	4.83 ± 1.17 Median 5.0	4.83 ± 0.98 Median 5.0	3.89 ± 0.97 Median 4.0	5.15 ± 1.38 Median 6.0	0.4048	0.0984	0.0984
RP	5.83 ± 1.83 Median 5.5	6.33 ± 1.37 Median 6.0	5.37 ± 1.71 Median 4.0	6.81 ± 1.52 Median 8.0	0.9858	0.0646	0.3543
SF	6.50 ± 1.76 Median 7.0	6.67 ± 1.21 Median 6.5	6.00 ± 1.80 Median 6.0	7.44 ± 1.74 Median 8.0	0.8022	0.1495	0.2516
V	13.50 ± 2.34 Median 13.5	14.67 ± 2.34 Median 14.5	12.18 ± 3.77 Median 12.0	15.89 ± 3.92 Median 16.0	0.9684	0.041	0.2797

Data are expressed as the mean ± standard deviation and as median for abnormally distributed variables; NR — non-recurrence group; R — recurrence group; G — group, I — intervention (CPVA), GxI — interaction of the group and intervention; QoL — quality of life; other abbreviations as in Table 2

process or cardiac denervation, or may originate from the placebo effect. Further studies suggest that the improvement in QoL seems to be caused by changing previously symptomatic events into asymptomatic ones [12, 13]; however, in our study we did not observe asymptomatic episodes of AF during Holter monitoring.

Limitations of the study

There are some limitations of our study. The paper represents a prospective, observational study and is subject to limitations of its design. The number of the patients who were examined was limited. Antiarrhythmic medication was used by some of the patients in both study groups one year after CPVA. Therefore, the results of our study should be interpreted with caution.

CONCLUSIONS

Circumferential pulmonary vein ablation results in a clinical improvement of patients with symptomatic AF regardless of the final arrhythmia termination. Patients after successful CPVA experienced a significant improvement in all of the domains of the QoL.

Conflict of interest: none declared

References

1. Coyne K, Margolis MK, Grandy S. The state of the patients-reported outcomes in atrial fibrillation: a review of current measures. *Pharmacoeconomics*, 2005; 23: 687–708.
2. Gronefeld G, Hohnloser S. Quality of live in atrial fibrillation: an increasingly important tissue. *Eur Heart J*, 2003; 5: H25–H33.
3. Rienstra M, Lubitz SA, Mahida S et al. Symptoms and functional status of patients with atrial fibrillation: State-of-the-Art and future Research Opportunities. *Circulation*, 2012; 125: 2933–2943. doi: [10.1161/CIRCULATIONAHA.111.069450](https://doi.org/10.1161/CIRCULATIONAHA.111.069450).
4. Spertus J, Dorian P, Bubien R et al. Development and validation of the atrial fibrillation effect on Quality-of-Life (AFEQT) questionnaire in patients with atrial fibrillation. *Circ Arrhythm Electrophysiol*, 2011; 4: 15–25. doi: [10.1161/CIRCEP.110.958033](https://doi.org/10.1161/CIRCEP.110.958033).
5. Gehi AK, Sears S, Goli N et al. Psychopathology and symptoms of atrial fibrillation: implication for therapy. *J Cardiovasc Electrophysiol*, 2012; 23: 473–478. doi: [10.1111/j.1540-8167.2011.02264.x](https://doi.org/10.1111/j.1540-8167.2011.02264.x).
6. Calkins H, Kuck KH, Cappato R et al. 2012 HRS/EHRA/EACS expert consensus statement on catheter and surgical ablation of atrial fibrillation: recommendations for patient selection, procedural techniques, patients management and follow-up, definitions, endpoints and research trial design: a report of the Heart Rhythm Society (HRS) Task Force on catheter and surgical ablation of atrial fibrillation. *Heart Rhythm*, 2012; 9: 632–696. doi: [10.1016/j.hrthm.2011.12.016](https://doi.org/10.1016/j.hrthm.2011.12.016)
7. Thrall G, Lip G, Carroll D. Depression, anxiety and quality of life in patients with atrial fibrillation. *Chest*, 2007; 132: 1259–1264.
8. Cong-Xin H, Jin-Jun L, Bo Y et al. Quality of life and cost for patients with premature ventricular contractions by radiofrequency catheter ablation. *PACE*, 2006; 6: 343–350.
9. Pappone C, Rosanio S, Oreto G et al. Circumferential radiofrequency ablation of pulmonary vein ostia a new anatomic approach for curing atrial fibrillation. *Circulation*, 2000; 102: 2619–2628.
10. Krzych LJ, Lach M, Mustafa S et al. Quality of life in patients after minimally invasive endoscopic atraumatic coronary artery bypass grafting: a long-term follow-up. *Kardiol Pol*, 2012; 70: 890–896.
11. Zboralski K, Gałeczki P, Wysokiński A. Quality of life and emotional functioning in selected cardiovascular disease. *Kardiol Pol*, 2009; 67: 1228–1234.
12. Berkowitsch A, Neumann T, Kurzidim K. Comparison of generic health survey SF-36 and arrhythmia related symptom severity check list in relation to post-therapy AF recurrence. *Europace*, 2003; 5: 351–355.
13. Berkowitsch A, Greiss H, Vukajlovic D et al. Usefulness of atrial fibrillation burden as a predictor for success of pulmonary vein isolation. *Pacing Clin Electrophysiol*, 2005; 28: 1292–1301.

Cite this article as: Woźniak-Skowerska IM, Skowerski MJ, Hoffmann A et al. Quality of life in patients with paroxysmal atrial fibrillation after circumferential pulmonary vein ablation. *Kardiol Pol*, 2016; 3: 244–250. doi: [10.5603/KPa2015.0160](https://doi.org/10.5603/KPa2015.0160).

Jakość życia pacjentów z napadowym migotaniem przedsionków po ablacji okrażającej żył płucnych

Iwona M. Woźniak-Skowerska¹, Mariusz J. Skowerski², Andrzej Hoffmann¹, Seweryn Nowak¹, Maciej Faryan¹, Jarosław Kolasa¹, Tomasz Skowerski³, Krzysztof Szydło¹, Anna Maria Wnuk-Wojnar¹, Katarzyna Mizia-Stec¹

¹I Oddział Kardiologii, SPSK nr 7, Śląski Uniwersytet Medyczny, Katowice

²Katedra i Klinika Kardiologii, Śląski Uniwersytet Medyczny, Katowice

³II Oddział Kardiologii, SPSK nr 7, Śląski Uniwersytet Medyczny, Katowice

Streszczenie

Wstęp: Migotanie przedsionków (AF) jest jedną z najczęstszych arytmii i wiąże się z pogorszeniem jakości życia (QoL). Izolacja żył płucnych (CPVA) jest jedną z metod terapeutycznych wykorzystywaną u objawowych pacjentów z AF, a jej kompleksowe efekty są wciąż w fazie oceny.

Cel: Celem pracy była obserwacja odległych wyników CPVA i ich wpływ na QoL chorych z AF przed i po CPVA.

Metody: Badaniem objęto 33 pacjentów (26 mężczyzn), w wieku: $54,2 \pm 9$ lat z symptomatycznym opornym na farmakoterapię AF (EHRA II–III), którzy byli poddani CPVA. Badania kliniczne, elektrokardiograficzne (EKG) oraz EKG metodą Holtera i SF-36 przeprowadzono przed, a także rok po CPVA. Jakość życia oceniano za pomocą Kwestionariusza SF-36 Survey Short-Form. W formularzu SF-36 zastosowano skalę 0–100 dla każdego z 8 parametrów QoL, takich jak: odczucie bólu (BP), ogólny stan zdrowia (GH), stan zdrowia psychicznego (MH), funkcjonowanie fizyczne (PF), stan emocjonalny (RE), stan cielesny (RP), funkcjonowanie społeczne (SF) i witalność (V).

Wyniki: Po roku od zabiegu CPVA 27 (82%) pacjentów nie miało napadów AF. Objawy AF (w skali EHRA) uległy zmniejszeniu niezależnie od skuteczności CPVA. Analiza QoL wykazała znaczną poprawę w zakresie wszystkich ocenianych parametrów u pacjentów bez nawrotu arytmii. U chorych z nawrotem AF żaden oceniany parametr QoL nie wykazywał istotnych zmian po roku obserwacji. Stwierdzono związek między CPVA i następującymi parametrami QoL: GH ($p = 0,018$), PF ($p = 0,042$), V ($p = 0,041$). Najwyższe wartości GH i V wykazano u chorych bez nawrotu AF w czasie roku po CPVA.

Wnioski: Zabieg CPVA prowadzi do redukcji objawów AF niezależnie od efektu, jakim jest ostateczne ustąpienie arytmii. Pacjenci po skutecznym CPVA odczuwają znaczną poprawę QoL w zakresie każdego ocenianego parametru.

Słowa kluczowe: migotanie przedsionków, izolacja żył płucnych, jakość życia

Kardiol Pol 2016; 74, 3: 244–250

Adres do korespondencji:

dr n. med. Iwona M. Woźniak-Skowerska, I Oddział Kardiologii, SPSK nr 7, Śląski Uniwersytet Medyczny, ul. Ziołowa 47, 40–635 Katowice, e-mail: iskowerska@hoga.pl

Praca wpłynęła: 22.02.2015 r.

Zaakceptowana do druku: 30.06.2015 r.

Data publikacji AoP: 19.08.2015 r.