

# Quality of life and depression in patients with different patterns of atrial fibrillation

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## Abstract

**Background:** Atrial fibrillation (AF) is difficult to cure and significantly affects quality of life as well as emotional status of patients.

**Aim:** To evaluate quality of life and depression level in patients with various patterns of AF.

**Methods:** We studied 150 consecutive patients with AF aged 35–83 years, including 61 patients with paroxysmal AF, 46 patients with persistent AF, and 43 patients with permanent AF. The control group included 70 healthy persons (mean age:  $55.5 \pm 14.5$  years). Quality of life was estimated using the Nottingham Health Profile questionnaire. Risk of depression occurrence was estimated using the Beck Depression Inventory scale. Physical abilities, energy level, pain, emotional reactions, sleep, social isolation, problems with work, family life and sexual life were analysed.

**Results:** The mean age of patients with paroxysmal AF was higher in comparison to patients with permanent AF ( $68.4 \pm 9.4$  vs  $62.0 \pm 9.2$  years,  $p < 0.05$ ). In patients with all AF forms, the prevalence of symptoms indicating depression was significantly higher in comparison with control group (paroxysmal AF:  $10.8 \pm 5.8\%$ , persistent AF:  $10.0 \pm 6.4\%$ , permanent AF:  $10.1 \pm 7.2\%$  vs  $5.7 \pm 5.8\%$  in controls,  $p < 0.01$ ). The level of depression was higher in women regardless of AF form ( $p < 0.005$ ). Patients with paroxysmal and permanent AF had lower scores of emotional reactions ( $p < 0.05$ ) and social isolation ( $p < 0.05$ ) in comparison with the control group. All patients with AF had lower scores of energy level in comparison with the control group (paroxysmal AF:  $1.2 \pm 0.2$ , persistent AF:  $1.1 \pm 0.2$ , permanent AF:  $1.2 \pm 0.2$  vs  $0.5 \pm 0.1$  in controls,  $p < 0.005$ ). Patients with paroxysmal, persistent and permanent AF had greater degree of activity limitations than the control group ( $1.8 \pm 0.2$ ,  $1.7 \pm 0.3$ ,  $2.1 \pm 0.3$ , respectively, vs  $1.0 \pm 0.2$ ,  $p < 0.005$ ). Limitations of work were detected in 28.6–35.9% of patients with various forms of AF, sex life disturbances in 23.8–33.9% of patients, and family life problems in 10.3–21.4% of patients. The lowest results of these scores were noted in patients with paroxysmal AF.

**Conclusions:** Atrial fibrillation, independently of its form, has substantial impact on the risk of depression occurrence. Patients with paroxysmal and permanent AF had lower self-evaluation of their energy level. In all studied groups of AF patients, the arrhythmia significantly limited quality of life, especially sexual life as well as professional and home activity.

**Key words:** atrial fibrillation, quality of life, depression

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## INTRODUCTION

Atrial fibrillation (AF) is the most common arrhythmia in clinical practice. Its prevalence in Poland is estimated at about 500,000. The incidence of AF increases with age: it is diagnosed in 5% of people above 65 years of age and in more than 10% of people above 80 years of age. The risk of AF rises proportionately to the occurrence of other heart disease [1]. In the last 20 years, the number of hospitalisations due to

AF increased on average by 60–70%, primarily due to ageing of the population and the increase in the incidence of various forms of heart disease, each being a potential cause of AF. Currently, paroxysmal or persistent AF is present in about 2–3 million people in the North America and 4.5 million people in Europe. The latter number is predicted to rise to 5.6 million people by 2050, and 50% of these patients will be above 80 years of age [2].

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Atrial fibrillation has a significant negative effect on quality of life (QoL), affecting daily living and resulting in mental health problems. Determinants of positive functioning assessment (quality of life) include (1) objective factors such as health status (and the results of medical tests), socioeconomic status (home, work, income) and social relationships (their quantity and quality); and (2) subjective factors: physical (capacity, complaints), mental (anxiety, depression, self-perception), interpersonal (social support, interactions with other persons), and social (satisfaction from work, financial situation and social position). In addition, a major problem in patients with all types of cardiac disease is the occurrence of depressive symptoms, resulting in significant increase in disability, reduction of QoL, and worsening of somatic disease [3, 4].

The purpose of this study was to evaluate QoL and depression level in patients with various forms of AF.

## METHODS

We studied 150 patients aged 35–83 years, including 55 women (mean age  $67.8 \pm 10.5$  years) and 95 men (mean age  $64.1 \pm 9.5$  years) with different forms of AF: paroxysmal AF was present in 61 patients (mean age  $68.4 \pm 9.4$  years), persistent AF, defined as arrhythmia that did not terminate spontaneously within 7 days, in 46 patients (mean age  $67.1 \pm 10.5$  years), and permanent AF in 43 patients (mean age  $62.0 \pm 9.2$  years). We excluded patients with AF due to valvular heart disease, with valve prosthesis, cardiomyopathy, heart failure or left ventricular dysfunction (ejection fraction  $< 55\%$ ). The control group included 70 healthy people (mean age  $55.5 \pm 14.5$  years), including 40 women (mean age  $54.8 \pm 12.5$  years) and 30 men (mean age  $56.5 \pm 13.3$  years).

Quality of life was assessed using Nottingham Health Profile (NHP) questionnaire developed by McEwen et al. [5]. The NHP questionnaire is used in many countries to evaluate patients with cardiac disease [6]. A Polish version of the NHP questionnaire was developed by Wrześniewski [7, 8] in accordance with basic rules of test adaptation. Accuracy and reliability of the Polish version have been similar to that of the original questionnaire. The NHP questionnaire consists of two parts. The first one includes 38 short statements regarding various aspects of QoL, both physical, such as energy level (EL), pain (P) and physical abilities (PA), and psychosocial, such as emotional reactions (ER), sleep (S) and social isolation (SI). The second part is related to the effects of current health status on work (i.e. paid employment), household activities (cleaning, cooking, small repairs), social life (going out to cinema, theatre, seeing friends), home life (relations with other people at home), sex life, interests and hobbies (sports, crafts) and free time (vacations and weekends). The patients answered “yes” or “no” to all questions. Scores were then calculated separately for each of the six domains of the first part of the questionnaire and for its second part. Possible score ranged from 0 to 3 for EL, 0 to 8 for P and PA, 0 to 9 for ER, 0 to 5 for S and SI. Higher scores indicated worse perceived QoL.

Depression was diagnosed and its level quantified using the Beck Depression Inventory (BDI) that is commonly used worldwide [9–13]. The BDI consists of 21 items rated 0 to 3 depending on intensity of symptoms. For each item, patients selected one answer that best described their condition during the last week preceding the evaluation. Different questions of BDI evaluate mood, pessimism, past failures, loss of satisfaction, guilty feelings, punishment feelings, self-dislike, suicidal thoughts or wishes, crying, irritability, social isolation, perception of own body, difficulties at work, sleeplessness, loss of energy, loss of appetite, body mass reduction, and somatic complaints. Questions 1 to 13 evaluate psychosomatic status, while questions 14 to 21 evaluate mental status. The overall score indicates depression severity [14]. Different cut-offs for the interpretation of BDI results are reported in the literature. The most widely used ones include American criteria (0–9 indicates no depression, 10–15 — mild depression, 16–23 — moderate depression, 24 or more — severe depression) and German criteria (0–11 indicates no depression, 12–19 — mild depression, 20–25 — moderate depression, 26 or more — severe depression). The Polish version of BDI was developed by Parnowski and Jernajczyk in 1977 [15]. Polish authors usually use the German criteria to evaluate the severity of depressive symptoms [16–18]. Reliability of the questionnaires used was expressed using the absolute Cronbach’s alpha values (Table 1). Reliability of both BDI and NHP was very high (0.82 and 0.72, respectively). The NHP questionnaire subscales evaluating psychosocial aspects of QoL were also very reliable (Table 1). The least reliable was the social isolation subarea, which might indicate relatively large variation of the perception of this aspect of life in patients with AF.

## Statistical analysis

Statistical analysis was performed using the SAS 9.2 package. To test relations between nominal variables, we used Pearson  $\chi^2$  test with Yates correction or exact Fisher test. Student t test was used to evaluate differences between mean values

**Table 1.** Reliability of the questionnaires used to evaluate quality of life (NHP) and depression (BDI) in the study group

	No. of questions	Cronbach’s alpha value
Energy level	3	0.62
Pain	8	0.68
Emotional reactions	9	0.72
Sleep	5	0.87
Social isolation	5	0.55
Physical abilities	8	0.68
NHP overall	6	0.72
BDI overall	21	0.82

**Table 2.** Various dimensions of quality of life in the study group according to NHP questionnaire

NHP	Paroxysmal AF	Persistent AF	Permanent AF	Healthy controls	P
EL (0–3)	1.2 ± 0.2	1.1 ± 0.2	1.2 ± 0.2	0.5 ± 0.1	< 0.005 paroxysmal, persistent, permanent AF vs controls
P (0–8)	1.8 ± 0.3	1.3 ± 0.3	1.5 ± 0.3	1.2 ± 0.2	NS
PA (0–8)	1.8 ± 0.2	1.7 ± 0.3	2.1 ± 0.3	1.0 ± 0.2	< 0.005 paroxysmal, permanent AF vs controls
ER (0–9)	1.9 ± 0.2	1.3 ± 0.2	1.5 ± 0.3	1.6 ± 0.2	NS
S (0–5)	2.2 ± 0.3	1.5 ± 0.3	1.2 ± 0.3	1.1 ± 0.2	NS
SI (0–5)	0.5 ± 0.1	0.4 ± 0.1	0.4 ± 0.1	0.5 ± 0.1	NS

AF — atrial fibrillation; EL — energy level; P — pain; PA — physical abilities; ER — emotional reactions; S — sleep; SI — social isolation

of normally distributed continuous variables. For non-normally distributed variables (with a significant result of the Shapiro-Wilk test), we used nonparametric Mann-Whitney test. Study hypotheses were verified at two-sided  $\alpha \leq 0.05$ .

## RESULTS

Analysis of BDI scores showed more severe symptoms indicating depression in all subsets of patients with AF (paroxysmal AF:  $10.8 \pm 5.8\%$ ; persistent AF:  $10.0 \pm 6.4\%$ ; and permanent AF:  $10.8 \pm 5.8\%$  compared to  $5.7 \pm 5.8\%$  in the control group,  $p < 0.01$ ).

Among women with AF, depression level measured by BDI was significantly higher compared to men ( $12.45 \pm 6.5$  vs  $9.16 \pm 5.9$ ,  $p < 0.005$ ). This effect was not seen in the control group ( $7.1 \pm 5.6$  in women vs  $4.0 \pm 5.8$  in men, NS).

All patients with AF had lower evaluation of energy level in comparison with the control group ( $p < 0.005$ ). This was seen in 60.7% of patients with paroxysmal AF, 54.8% of patients with persistent AF, 58.9% of patients with permanent AF, and in 32.9% of subjects in the control group.

Patients with paroxysmal and permanent AF had greater degree of activity limitations than the control group ( $p < 0.005$ ). Activity limitation was reported by 67.9% of patients with paroxysmal AF, 66.7% of patients with persistent AF, 69.2% of patients with permanent AF, and in 44.3% of subjects in the control group. All dimensions of QoL are presented in Table 2.

Indicators of QoL were significantly worse in women in only two subareas, of sleep and physical abilities (Table 3).

Analysis of the second part of the NHP questionnaire revealed that the arrhythmia in patients with paroxysmal and permanent AF was most limiting in regard to sex life, work, and household activities, and least limiting in regard to home life. In patients with persistent AF, limitations were mostly perceived in regard to household activities and free time, and least related to home life, interests and hobbies (Table 4).

In men, the arrhythmia was most limiting in regard to work and sex life, and in women in regard to household acti-

**Table 3.** Various dimensions of quality of life in women and men according to NHP questionnaire

NHP	Women	Men	P
EL (0–3)	1.4 ± 0.2	1.0 ± 0.1	NS
P (0–8)	2.0 ± 0.3	1.3 ± 0.2	NS
PA (0–8)	2.5 ± 0.3	1.5 ± 0.2	< 0.001
ER (0–9)	1.8 ± 0.3	1.4 ± 0.2	NS
S (0–5)	2.4 ± 0.3	1.3 ± 0.2	< 0.001
SI (0–5)	0.4 ± 0.1	0.5 ± 0.1	NS

Abbreviations as in Table 2

vities and free time (Table 5). Healthy control group showed no significant differences in perceived QoL between women and men.

We noted significant correlations between BDI scores and different aspects of QoL, both in patients with AF ( $p < 0.001$ ) and healthy controls ( $p < 0.05$ ). More severe depression symptoms correlated with worse perceived QoL (Table 6).

## DISCUSSION

Atrial fibrillation is a significant challenge for both patients and physicians of many specialties. Thus, there is a need for skilful evaluation of some indexes of health status and treatment outcomes in this patient group. Assessment of AF treatment efficacy using mainly objective criteria such as mortality and morbidity should be combined with evaluation of QoL. A number of studies showed reduced QoL in patients with AF. Van den Berg et al. [19] demonstrated that paroxysmal AF significantly reduced QoL as assessed using the SF-36 questionnaire. This effect was primarily due to symptoms related to arrhythmia and autonomic dysfunction that were evaluated concomitantly with a Holter monitoring. In our study, we evaluated QoL and compared its various parameters in patients with different forms of AF. We noted significant differences in regard to physical functioning between patients

**Table 4.** Percentages of patients reporting disease-related limitations in different areas of life according to NHP questionnaire, part 2

NHP	Paroxysmal AF	Persistent AF	Permanent AF	Healthy controls	P (paroxysmal, persistent, permanent AF vs controls)
Work	32.1%	28.6%	35.9%	12.9%	Paroxysmal AF vs controls: < 0.05 Permanent AF vs controls: < 0.01
Household activities	32.1%	38.1%	30.8%	15.7%	Paroxysmal AF vs controls: < 0.05 Persistent AF vs controls: < 0.05
Social life	21.4%	26.2%	23.1%	8.6%	Persistent AF vs controls: < 0.05
Home life	16.1%	21.4%	10.3%	4.3%	Persistent AF vs controls: < 0.01
Sex life	33.9%	23.8%	33.1%	18.6	NS
Interests and hobbies	30.4%	21.4%	25.6%	15.7%	NS
Free time	30.4%	30.9%	17.9%	7.1%	Paroxysmal AF vs controls: < 0.005 Persistent AF vs controls: < 0.005

AF — atrial fibrillation

**Table 5.** Percentages of women and men reporting disease-related limitations in different areas of life according to NHP questionnaire

	Work	Household activities	Social life	Home life	Sex life	Interests and hobbies	Free time
Women	18%	46%	20%	22%	18%	24%	32%
Men	40.2%	26.4%	25%	12%	38%	28%	24%
P	< 0.05	NS	NS	NS	< 0.01	NS	NS

**Table 6.** Correlations between Beck Depression Inventory scores and various dimensions of quality of life

	EL	P	PA	ER	S	SI
AF patients	0.44	0.30	0.31	0.65	0.44	0.51
Controls	0.62	0.56	0.44	0.77	0.45	0.41

Abbreviations as in Table 2

with paroxysmal or permanent AF and healthy controls. The AF patients reported significantly more problems with climbing stairs, bending and reaching for objects. In all subsets of AF patients, the arrhythmia resulted in limitation of home activities. In addition, activities related to work and sex life were limited in patients with paroxysmal and permanent AF, possibly due to concerns of provoking AF episode during physical activity. Smaller impact of persistent AF on different studied areas of life may be related to the fact that in these patients, the burden of symptomatic arrhythmia and its recurrences may be smaller, explaining the persistent nature of AF. In addition, unlike permanent AF, persistent AF does not result in permanent cardiac chamber remodelling or symptoms of heart failure. It seems that AF has less negative effect

on psychosocial functioning of AF patients, as they did not differ in this regard from healthy controls, with similar social relationships noted in both groups.

Similar QoL in patients with permanent AF and control subjects with sinus rhythm was reported in only few studies [20]. Most authors showed significant differences in all aspects of QoL between patients with paroxysmal AF and healthy controls [4, 20–23]. However, the arrhythmia itself, with frequent episodes and recurrences or progression to permanent AF, has more negative effect on QoL than the underlying structural heart disease [20]. It was also reported that frequent arrhythmia recurrences in patients with paroxysmal AF impair QoL to a greater extent compared to persistent and chronic arrhythmia [24, 25].

The issue of improving QoL and exercise tolerance with sinus rhythm restoration in patients with persistent AF was a subject of many studies [26]. However, an analysis of 716 patients in the AFFIRM study showed comparable QoL in rhythm control and rate control groups. Attempts to improve QoL by restoring sinus rhythm were mostly unsuccessful [27]. Large randomised STAF, PIAF and RACE studies showed higher QoL in AF patients managed with rhythm frequency control strategy compared to the patients in whom sinus rhythm restoration was attempted [28].

Other studies showed lower QoL in women with AF as evaluated using the SF-36 questionnaire (odds ratio 3.43,  $p < 0.05$ ), but without indicating specific areas of life [4, 29]. Our study showed more problems with sleep and physical abilities in women compared to men ( $p < 0.05$ ). The study groups did not differ significantly in regard to age. This indicated that the observed differences might be related to the fact that women are more sensitive to the symptoms of arrhythmia and its overall burden, as was also shown using somatisation tests (subjective evaluation of amplification of even mild symptoms) [29].

Our study findings also support the notion that AF predisposes to the occurrence of depression. Differences between various subsets of AF patients may be related to habituation to a longer lasting disease, and a smaller burden of arrhythmia-related symptoms and anxiety, leading to gradual acceptance of the disease. Similar results were also reported using BDI by Thrall et al. [28]. Among 101 patients (including 52% with paroxysmal AF, 5.9% with persistent AF, and 41.6% with chronic AF), as much as 71% scored  $\geq 10$  points. In more than 30% of patients, elevated depression and anxiety levels persisted during 6 months of follow-up. However, no significant differences were seen between subsets of AF patients [4]. The level of depression was significantly higher in women regardless of the AF form ( $p < 0.005$ ). In our study, BDI scores did not determine any specific psychiatric diagnosis but only indicated reduced mood in the study subjects. Despite more than a decade of studies dealing with these issues, QoL remains an insufficiently highlighted problem in patients with AF. We should not neglect this issue in everyday care of AF patients. It may be hoped that QoL measures will be a major endpoint in current and future clinical trials, leading to the development of better tools to evaluate the psychosomatic status of AF patients, verification of study findings, drawing appropriate conclusions, and more effective treatment.

## CONCLUSIONS

All forms of AF have substantial impact on the risk of depression occurrence. Among patients with AF, depression is much more common in women than in men. Patients with paroxysmal and permanent AF had lower self-evaluation of the physical aspects of QoL. In different subsets of AF patients, the arrhythmia significantly limited sex life, work, and household activities.

## References

1. Benjamin EJ, Levy D, Vaziri SM et al. Independent risk factors for atrial fibrillation in a population-based cohort. The Framingham Heart Study. *JAMA*, 1994; 271: 840–844.
2. ACC/AHA/ESC 2006 Guidelines for the management of pts with atrial fibrillation: executive summary. *Eur Heart J*, 2006; 27: 1979–2030.
3. Katon W, Ciechanowski P. Impact of major depression on chronic medical illness. *J Psychosom Res*, 2002; 53: 859–863.
4. Thrall G, Lip GYH, Carroll D et al. Depression, anxiety, and quality of life in patients with atrial fibrillation. *Chest*, 2007; 132: 1259–1264.
5. McEwen J, Hunt S, McKenna S. A measure of perceived health: the Nottingham Health Profile. In: Abellin T, Brzeziński ZJ, Carstairs VDI eds. *Measurement in health promotion and protection*. World Health Organization, Copenhagen 1987: 590–603.
6. The European Group for Quality of Life and Health Measurement. *European Guide to the Nottingham Health Profile*. Montpellier 1992.
7. Wrześniewski K. Badanie subiektywnego stanu zdrowia za pomocą polskiej adaptacji the Nottingham Health Profile. In: Karski JB, Kirschner H, Leowski J eds. *Współczesne potrzeby i możliwości pomiaru zdrowia*. Wydawnictwo Ignis, Warszawa 1997: 37–41.
8. Wrześniewski K. Jak badać jakość życia pacjentów kardiologicznych? *Kardiologia*, 2009; 67: 790–794.
9. Shemesh E, Koren-Michowitz M, Yehuda R et al. Symptoms of posttraumatic stress disorder in patients who have had a myocardial infarction. *Psychosomatics*, 2006; 47: 231–239.
10. Pelle AJ, Denollet J, Zwisler AD et al. Overlap and distinctiveness of psychological risk factors in patients with ischemic heart disease and chronic heart failure: are we there yet? *J Affect Disord*, 2009; 113: 150–156.
11. Brzostek T, Rak A, Piórecka B et al. Selected risk factors for coronary heart disease in a group of women aged 30–65 in Kraków. *Wiad Lek*, 2004; 57 (suppl. 1): 24–28.
12. Ibatov AD. Effect of lorazepam on emotional status and quality of life of patients with ischemic heart disease. *Kardiologia*, 2006; 46: 11–14.
13. Blumenthal JA, Sherwood A, Babyak MA et al. Effects of exercise and stress management training on markers of cardiovascular risk in patients with ischemic heart disease: a randomized controlled trial. *JAMA*, 2005; 293: 1626–1634.
14. Beck AT, Ward CH, Mendelson M et al. An inventory for measuring depression. *Arch Gen Psychiatry*, 1961; 4: 561–571.
15. Parnowski T, Jernajczyk W. Inwentarz Depresji Becka w ocenie nastroju osób zdrowych i chorych na choroby afektywne. *Psychiatr Pol*, 1977; 11: 417–420.
16. Piotrowicz R, Potocka J, Araszkiwicz A et al. Depresja jako problem kardiologiczny w praktyce lekarzy podstawowej opieki zdrowotnej. *Folia Cardiol*, 2003; 10: 177–184.
17. Wilkowska A. Epizody depresyjne u pacjentów z chorobą niedokrwienną serca. *Psychiatria w Praktyce Klinicznej*, 2008; 1: 12–21.
18. Sawicka J, Jurkowska G, Bachórzewska-Gajewska H et al. Ocena jakości życia oraz częstość występowania objawów depresji u pacjentów z chorobą niedokrwienną serca kierowanych na planową koronarografię. *Przegl Kardiol*, 2008; 3: 23–27.
19. Van den Berg, MP, Hassink, RJ, Tuinenburg, AE et al. Quality of life in patients with paroxysmal atrial fibrillation and its predictors: importance of the autonomic system. *Eur Heart J*, 2001; 22: 247–253.
20. Howes CJ, Reid MC, Brandt C et al. Exercise tolerance and quality of life in elderly patients with chronic atrial fibrillation. *J Cardiovasc Pharmacol Ther*, 2001; 6: 23–29.

21. Dorian P, Jung W, Newman D et al. The impairment of health-related quality of life in patients with intermittent atrial fibrillation: implications for assessment of investigational therapy. *J Am Coll Cardiol*, 2000; 36: 1303–1309.
22. Kang Y, Bahler R Health related quality of life in patients newly diagnosed with atrial fibrillation. *Eur J Cardiovasc Nurs*, 2003; 3: 71–76.
23. Paquette M, Roy D, Talajic M et al. Role of gender and personality on quality-of-life impairment in intermittent atrial fibrillation. *Am J Cardiol*, 2000; 86: 764–768.
24. Jung W, Herwig S, Camm J et al. Are there differences in quality of life measures depending on clinical type of atrial fibrillation? *PACE*, 1998; 21 (Part II): 890–890.
25. Lüderitz B, Jung W. Quality of life in patients with atrial fibrillation. *Arch Intern Med*, 2000; 160: 1749–1757.
26. Singh SN, Tang XC, Singh BN et al. Quality of life and exercise performance in patients in sinus rhythm versus persistent atrial fibrillation: a Veterans Affairs Cooperative Studies Program Substudy. *J Am Coll Cardiol*, 2006; 48: 721–730.
27. Jenkins LS, Brodsky M, Schron E et al. The Affirm Investigators. Quality of life in atrial fibrillation: The Atrial Fibrillation Follow-up Investigation of Rhythm Management (AFFIRM) study. *Am Heart J*, 2005; 149: 112–120.
28. Thrall G, Lane D, Carroll D et al. Quality of life in patients with atrial fibrillation: a systematic review. *Am J Med*, 2006; 119: 448e1–448e19.
29. Paquette M, Roy D, Talajic M et al. Role of gender and personality on quality-of-life impairment in intermittent atrial fibrillation. *Am J Cardiol*, 2000; 86: 764–768.

# Ocena jakości życia i występowania depresji u pacjentów z różnymi formami migotania przedsionków

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## Streszczenie

**Wstęp:** Migotanie przedsionków (AF) z powodu charakteru choroby i trudności w leczeniu istotnie wpływa na jakość życia i psychikę pacjentów.

**Cel:** Celem pracy była ocena jakości życia i poziomu depresji u pacjentów z różnymi formami AF.

**Metody:** Do badań włączono 150 osób (kobiet i mężczyzn) w wieku 35–83 lat z różnymi formami AF — 61 z napadowym AF (wiek śr.  $68,4 \pm 9,4$  roku), 46 z przetrwałym AF (wiek śr.  $67,1 \pm 10,5$  roku), 43 z utrwalonym AF (wiek śr.  $62,0 \pm 9,2$  roku) oraz 70 zdrowych osób z grupy kontrolnej (wiek śr.  $55,5 \pm 14,5$  roku). Do oceny jakości życia wykorzystano kwestionariusz *Nottingham Health Profile* (NHP), natomiast prognozowanie depresji i jej nasilenie diagnozowano za pomocą skali depresji Becka (BDI, *Beck Depression Inventory*). Analizowano jakość życia dotyczącą sfery fizycznej: energię, ból, ograniczenia ruchowe i reakcje emocjonalne, zaburzenia snu, wyobcowanie społeczne. Oceniano też potencjalne zakłócenia pracy zarobkowej, życia rodzinnego i życia seksualnego.

**Wyniki:** Zaobserwowano występowanie objawów wskazujących na depresję we wszystkich grupach pacjentów z AF ( $10,8 \pm 5,8$  v.  $10,0 \pm 6,4$  v.  $10,1 \pm 7,2$ ) w porównaniu z grupą kontrolną ( $5,7 \pm 5,8$ ;  $p < 0,01$ ). Wykazano istotnie wyższy poziom depresji u kobiet, bez względu na formę AF ( $p < 0,005$ ). Wszyscy badani z AF istotnie gorzej ocenili swój poziom energii ( $1,2 \pm 0,2$  v.  $1,1 \pm 0,2$  v.  $1,2 \pm 0,2$ ) w porównaniu z grupą kontrolną ( $0,5 \pm 0,1$ ;  $p < 0,005$ ). Chorzy z napadowym i utrwalonym AF obserwowali u siebie większe ograniczenia ruchowe ( $1,8 \pm 0,2$  v.  $1,7 \pm 0,3$  v.  $2,1 \pm 0,3$ ) niż osoby zdrowe ( $1,0 \pm 0,2$ ;  $p < 0,005$ ). Ograniczenia w pracy zarobkowej stwierdzono u 28,6–35,9% pacjentów z różnymi formami AF, zaburzenia życia seksualnego u 23,8–33,9%, a życia rodzinnego u 10,3–21,4%.

**Wnioski:** Migotanie przedsionków niezależnie od formy istotnie wpływa na ryzyko wystąpienia depresji; znacznie częściej dotyczy ona kobiet. Pacjenci z napadowym i utrwalonym AF gorzej oceniają swoją jakość życia w sferze fizycznej. W grupach osób z różnymi formami AF choroba istotnie ogranicza życie seksualne, pracę zarobkową i wykonywanie prac domowych.

**Słowa kluczowe:** migotanie przedsionków, jakość życia, depresja

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