Abstract: P1035

Factors associated with quality-of-life improvement after catheter ablation of atrial fibrillation: insights from the Kansai Plus Atrial Fibrillation (KPAF) registry

Authors:
T Kanda1, M Masuda1, S Shizuta2, A Kobori3, K Inoue4, K Kaitani5, T Kurotobi6, I Morishima7, Y Nakazawa8, T Tsujimura1, O Iida1, M Asai1, T Mano1, 1Kansai Rosai Hospital, Cardiovascular Center - Amagasaki - Japan, 2Kyoto University Graduate School of Medicine, Department of Cardiovascular Medicine - Kyoto - Japan, 3Kobe City Medical Center General Hospital, Division of Cardiology - Kobe - Japan, 4Sakurabashi-Watanabe Hospital, Cardiovascular center - Osaka - Japan, 5Otsu Red Cross Hospital, Division of Cardiology - Otsu - Japan, 6Shiroyama Hospital, Cardiovascular center - Habikino - Japan, 7Ogaki Municipal Hospital, Department of cardiology - Ogaki - Japan, 8Shiga University of Medical Science, Department of Cardiovascular Medicine, Heart Rhythm Center - Shiga - Japan,

Topic(s):
Rhythm Control, Catheter Ablation

Citation:

Background

Improving the quality of life (QoL) is one of the main purposes of catheter ablation (CA) of persistent atrial fibrillation (AF). Factors associated with QoL improvement after CA of AF patients have not been clarified. The Kansai Plus Atrial Fibrillation (KPAF) Registry is a multi-center registry enrolling more than 5,000 consecutive patients undergoing the first radiofrequency catheter ablation of AF.

Purpose

The aim of this study was to investigate the QoL change after AF ablation and its associated factors.

Methods

A total of 2030 patients in whom the QoL score was assessed before and one year after the ablation were enrolled from the KPAF registry (age 64±10 years, 75% male, paroxysmal 66%, CHADS2 score 1.1±1.1). The QoL was evaluated using the AF specific QoL evaluation method (AFQLQ), which scores the patient QoL within a range of 0-98 points.

Results

Overall, catheter ablation showed a significant increase in the AFQLQ score (68±19 vs. 86±13 points, P<0.01). AF recurrence was observed in 372 cases (18%) during a 1-year follow-up period. A multivariate analysis showed that AF recurrence, symptomatic AF, long AF duration, high preprocedural heart rate (>110 bpm) and small left atrial diameter were independent predictors of a QoL improvement defined as a >10% score increase.

Conclusions

CA of AF significantly improved the QoL. AF recurrence was one of the strong factors associated with QoL improvement. Symptomatic AF, long AF duration, high preprocedural heart rate and small left atrial diameter were independent predictors of QoL improvement.
Abstract: P1035
Factors associated with quality-of-life improvement after catheter ablation of atrial fibrillation: insights from the Kansai Plus Atrial Fibrillation (KPAF) registry

Authors: T Kanda 1, M Masuda 1, S Shizuta 2, A Kobori 3, K Inoue 4, K Kaitani 5, T Kurotobi 6, I Morishima 7, Y Nakazawa 8, T Tsujimura 1, O Iida 1, M Asai 1, T Mano 1

Kansai Rosai Hospital, Cardiovascular Center – Amagasaki – Japan, 2 Kyoto University Graduate School of Medicine, Department of Cardiovascular Medicine – Kyoto – Japan, 3 Kobe City Medical Center General Hospital, Division of Cardiology – Kobe – Japan, 4 Sakurabashi-Watanabe Hospital, Cardiovascular center – Osaka – Japan, 5 Otsu Red Cross Hospital, Division of Cardiology – Otsu – Japan, 6 Shiroyama Hospital, Cardiovascular center – Habikino – Japan, 7 Ogaki Municipal Hospital, Department of Cardiology – Ogaki – Japan, 8 Shiga University of Medical Science, Department of Cardiovascular Medicine, Heart Rhythm Center – Shiga – Japan

Topic(s): Rhythm Control, Catheter Ablation

Citation: Background
Improving the quality of life (QoL) is one of the main purposes of catheter ablation (CA) of persistent atrial fibrillation (AF). Factors associated with QoL improvement after CA of AF patients have not been clarified. The Kansai Plus Atrial Fibrillation (KPAF) Registry is a multi-center registry enrolling more than 5,000 consecutive patients undergoing the first radiofrequency catheter ablation of AF.

Purpose
The aim of this study was to investigate the QoL change after AF ablation and its associated factors.

Methods
A total of 2030 patients in whom the QoL score was assessed before and one year after the ablation were enrolled from the KPAF registry (age 64±10 years, 75% male, paroxysmal 66%, CHADS2 score 1.1±1.1).

The QoL was evaluated using the AF specific QoL evaluation method (AFQLQ), which scores the patient QoL within a range of 0–98 points.

Results
Overall, catheter ablation showed a significant increase in the AFQLQ score (68±19 vs. 86±13 points, P<0.01). AF recurrence was observed in 372 cases (18%) during a 1-year follow-up period. A multivariate analysis showed that AF recurrence, symptomatic AF, long AF duration, high preprocedural heart rate (>110 bpm) and small left atrial diameter were independent predictors of a QoL improvement defined as a >10% score increase.

Conclusions
CA of AF significantly improved the QoL. AF recurrence was one of the strong factors associated with QoL improvement. Symptomatic AF, long AF duration, high preprocedural heart rate and small left atrial diameter were independent predictors of QoL improvement.

Table. Factors associated with a QoL improvement

<table>
<thead>
<tr>
<th>Factor</th>
<th>Univariate</th>
<th>Multivariate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (per an increase of 10 years)</td>
<td>0.93</td>
<td>0.84-1.02</td>
</tr>
<tr>
<td>Female</td>
<td>1.04</td>
<td>0.84-1.30</td>
</tr>
<tr>
<td>Persistent AF</td>
<td>0.50</td>
<td>0.41-0.61</td>
</tr>
<tr>
<td>AF recurrence at 1 year</td>
<td>0.51</td>
<td>0.41-0.65</td>
</tr>
<tr>
<td>Duration of AF, year</td>
<td>1.03</td>
<td>1.01-1.05</td>
</tr>
<tr>
<td>Symptomatic AF</td>
<td>3.99</td>
<td>3.14-4.85</td>
</tr>
<tr>
<td>Hypertension</td>
<td>0.95</td>
<td>0.78-1.14</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>0.89</td>
<td>0.68-1.17</td>
</tr>
<tr>
<td>Heart failure</td>
<td>0.74</td>
<td>0.56-0.99</td>
</tr>
<tr>
<td>Preprocedural heart rate &gt; 110 bpm</td>
<td>1.84</td>
<td>1.05-3.20</td>
</tr>
<tr>
<td>Ejection fraction &lt; 40%</td>
<td>1.49</td>
<td>0.35-6.40</td>
</tr>
</tbody>
</table>

Factors with a p<0.05 in the univariate analysis were incorporated in the multivariate analysis.

QoL, quality of life; OR, odds ratio; AF, atrial fibrillation; bpm, beat per minute.