

New frontiers in the evaluation and treatment of patients with atrial fibrillation

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Over the last 10 years the treatment of atrial fibrillation has changed dramatically. Catheter ablation of atrial fibrillation has emerged from experimental procedure to a very commonly performed procedure in patients with paroxysmal, persistent and long-standing persistent atrial fibrillation. There is considerable evidence available demonstrating that catheter ablation of atrial fibrillation is more effective than antiarrhythmic drug therapy in controlling atrial fibrillation and that ablation of atrial fibrillation improves quality of life.

Although great progress has been made in improving the techniques and outcomes of catheter ablation of atrial fibrillation there are a number of important unanswered questions.

1. The optimal approach for ablation in patients with long-standing persistent atrial fibrillation need to be better defined.
2. Safety and efficacy of catheter ablation in common patients population need to be defined.
3. More information is needed on impact of atrial fibrillation ablation on mortality and stroke prevention.

To improve the safety and efficacy of atrial fibrillation ablation the great interest is currently focused on the development of new ablation tools that allow creation of more permanent lesions and therefore diminish the problem of pulmonary venous reconnection and reduce the need for repeat ablation procedures. Another area of intense research focus on procedures that target and ablate ganglionated plexi. Substantial progress has also been made on developing the tools to allow remote/automatic/robotic ablation procedures and to allow electrophysiology studies and catheter ablation to be performed in magnetic resonance scanner.

Conclusion

The techniques and tools of atrial fibrillation ablation continue to improve. This positive development makes a good perspective for the treatment of patients with atrial fibrillation.