

INTRODUCTION

Over many years, various terms such as "arrhythmia", "dysrhythmia", "ectopic rhythm" and disorder of heart beat have been loosely used in order to describe disturbances in cardiac rhythm. However, "arrhythmia" is the commonly used designation that has been widely accepted by most cardiologists and electrocardiographers.⁽¹⁾

Some cardiac arrhythmias are rather benign and clinically insignificant, whereas others are truly serious ⁽¹⁾ and unresponsive to medical treatment, forming a source of morbidity and mortality for a small but significant group of patients.⁽²⁾

Many serious and complex concerns about the role of antiarrhythmic drugs in treating patients with many types of cardiac arrhythmias, particularly those who have underlying heart disease and left ventricular dysfunction, remain unresolved.⁽³⁾

Sudden cardiac death (SCD) is the major cause of morbidity and mortality in the United States. Each year, approximately 400,000 people die suddenly. In the majority, this sudden cardiac death is felt to be of arrhythmogenic origin (ventricular tachycardia or fibrillation).⁽⁴⁾ Certain other apparent causes include mitral valve prolapse and the Wolff Parkinson white syndrome,⁽⁵⁾ therefore, the epidemic of such cardiac arrhythmias is far greater than the much heralded risk of acquired immune deficiency syndrome (AIDS).⁽⁶⁾

Methods to identify more precisely those patients at risk of sudden cardiac death as well as to determine efficacy of therapy, have developed alongside advances in treatment.⁽⁷⁾ Over the last decade many more options for the treatment of cardiac arrhythmias have become available, such as surgery, catheter ablation, specific pacemakers and the automatic implantable cardioverter defibrillator (AICD).⁽⁸⁾

Current surgical techniques are available to treat patients with ventricular tachycardias, Wolff Parkinson white syndrome, atrioventricular nodal reentrant tachycardia, ectopic automatic atrial tachycardia, atrial fibrillation and atrial flutter.⁽⁹⁾

The objectives of direct surgical approach to treat patients with tachycardias are to excise, isolate or interrupt critical tissue in the heart required for the initiation, maintenance or propagation of the tachycardia while preserving or even improving myocardial function.⁽¹⁰⁾

Appropriate patient selection and an efficient collaboration between cardiac surgeon and clinical electrophysiologist who must keep an open line of communication through the entire surgical management, are essential for surgery to be successful.⁽¹¹⁾

The aim of this work is to throw some lights on the surgically amenable arrhythmias and the available trends currently used in their management.