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**Department of Anesthesia,**  
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# **Prevention of Atrial Fibrillation after Cardiac Surgery**

*Essay*

*Submitted for Partial Fulfillment of Master Degree  
in Anesthesia*

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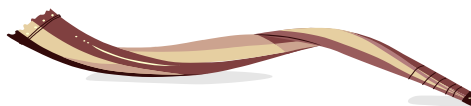
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## *List of Abbreviations*

<b>Abb.</b>	<b>Full term</b>
<b>ACEIs</b>	Angiotensin –Converting Enzyme-Inhibitor
<b>ACS</b>	Acute Coronary Syndrome
<b>AF</b>	Atrial Fibrillation
<b>AFFRiM</b>	Atrial Fibrillation Follow up investigation of Rhythm Management
<b>aPTT</b>	Activated Partial Thrombin Time
<b>ARB</b>	Angiotensin Receptor Blocker
<b>AV</b>	Atrio-Ventricular
<b>AVERRoES</b>	Reduce Apixban Versus acetylsalicylic acid to Reduce the Rate of Embolic Stroke in atrial fibrillation
<b>b.i.d</b>	bis in die(twice daily)
<b>BMS</b>	Bare Metal Stent
<b>CHA2DS2-VASC</b>	Cardiac failure, Hypertention, Age>75 (doubled), Diabetes, Stroke (doubled), Vascular disease, Age (65-74), Sex Category female
<b>CHADS2</b>	Cardiac failure, Hypertention, Age, Diabetes, Stroke (doubled)
<b>CrCl</b>	Creatinin Clearance
<b>CRT</b>	Cardiac Resynchronization Therapy
<b>CT</b>	Computerized Tomography
<b>CV</b>	Cardioversion
<b>DC</b>	Direct Cardioversion
<b>DCC</b>	Direct Current Cardioversion
<b>DIAMOND</b>	Danish Investigation of Arrhythmia and Mortality ON Dofetilide
<b>ECG</b>	Electrocardiograph
<b>ER</b>	Extended Release formulation
<b>GP</b>	Ganglionic Plexi

<b>Abb.</b>	<b>Full term</b>
<b>HAS-BLED</b>	Hypertention, Abnormal renal or liver function, Stroke, Bleeding history, Labile INR, Elderly>65, Drug or alcohol.
<b>I.V</b>	IntraVenous
<b>ICE</b>	Intra Cardiac Echocardiography
<b>ICH</b>	IntraCranial Hemorrhage
<b>INR</b>	International Normalized Ratio
<b>IVC</b>	Inferior Vena Cava
<b>LA</b>	Left Atrium
<b>LIPV</b>	Left Inferior Pulmonary Vein
<b>LMWH</b>	Low Molecular Weight Heparin
<b>LSPV</b>	Left Superior Pulmonary Vein
<b>LV</b>	Left Ventricle
<b>LVED</b>	Left Ventricular End Diastole
<b>LVEF</b>	Left Ventricular Ejection Fraction
<b>MI</b>	Myocardial Infarction
<b>MRI</b>	Magnetic Resonance Imaging
<b>N.A</b>	Not Applicable
<b>NA</b>	Neuroaxial Anesthesia
<b>NOACs</b>	Novel Oral Anticoagulants
<b>NYHA</b>	New York Heart Association
<b>o.d.</b>	Once daily
<b>OAC</b>	Oral Anticoagulant
<b>PAF</b>	Paroxysmal Atrial Fibrillation
<b>PCI</b>	Percutaneous Intervention
<b>PIAF</b>	Pharmacological Intervention in Atrial Fibrillation
<b>PPIs</b>	Proton Pump Inhibitors
<b>PT</b>	Prothrombin Time
<b>PT</b>	Prothrombin Time
<b>PV</b>	Pulmonary Vein

<b>Abb.</b>	<b>Full term</b>
<b>PVPs</b>	Pulmonary Vein Potentials
<b>PVs</b>	Pulmonary Veins
<b>RACE</b>	Rate Control versus Electrical cardioversion for persistent atrial fibrillation
<b>RELY</b>	Randomized Evaluation of Long anticoagulation therapy with dabigatran
<b>RF</b>	RadioFrequency
<b>RIPV</b>	Right Inferior Pulmonary Vein
<b>ROCKET</b>	Rivoroxaban Once daily oral-direct factor Xa inhibition Compared with vit K antagonism for prevention of stroke and Embolism Trial in atrial fibrillation
<b>RRR</b>	Relative Risk Reduction
<b>RSPV</b>	Right Superior Pulmonary Vein
<b>STAF</b>	The Strategies of Treatment of Atrial Fibrillation
<b>SVC</b>	Superior Vena Cava
<b>TIA</b>	Transient Ischemic Attack
<b>TOE</b>	TransOesophageal Echo
<b>TTR</b>	Time in Therapeutic Range
<b>UFH</b>	UnFractionated Heparin
<b>UH</b>	Unfractionated Heparin
<b>VKA</b>	Vitamin K Antagonist

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# Introduction

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# Aim of the Work

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# Chapter (1)

## **Anatomy and Physiology of the Conductive System of the Heart**

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## Chapter (2)

# **Pathophysiology of Atrial Fibrillation after Cardiac Surgery**

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# Chapter (3)

## **Pharmacological Management of Atrial Fibrillation and Rhythm Control**

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## Chapter (4)

# **Peri-operative Methods for Prevention of Post-Operative Atrial Fibrillation**

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# Summary

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