TRANSATRIAL SEPTAL APPROACH FOR MITRAL VALVE SURGERY

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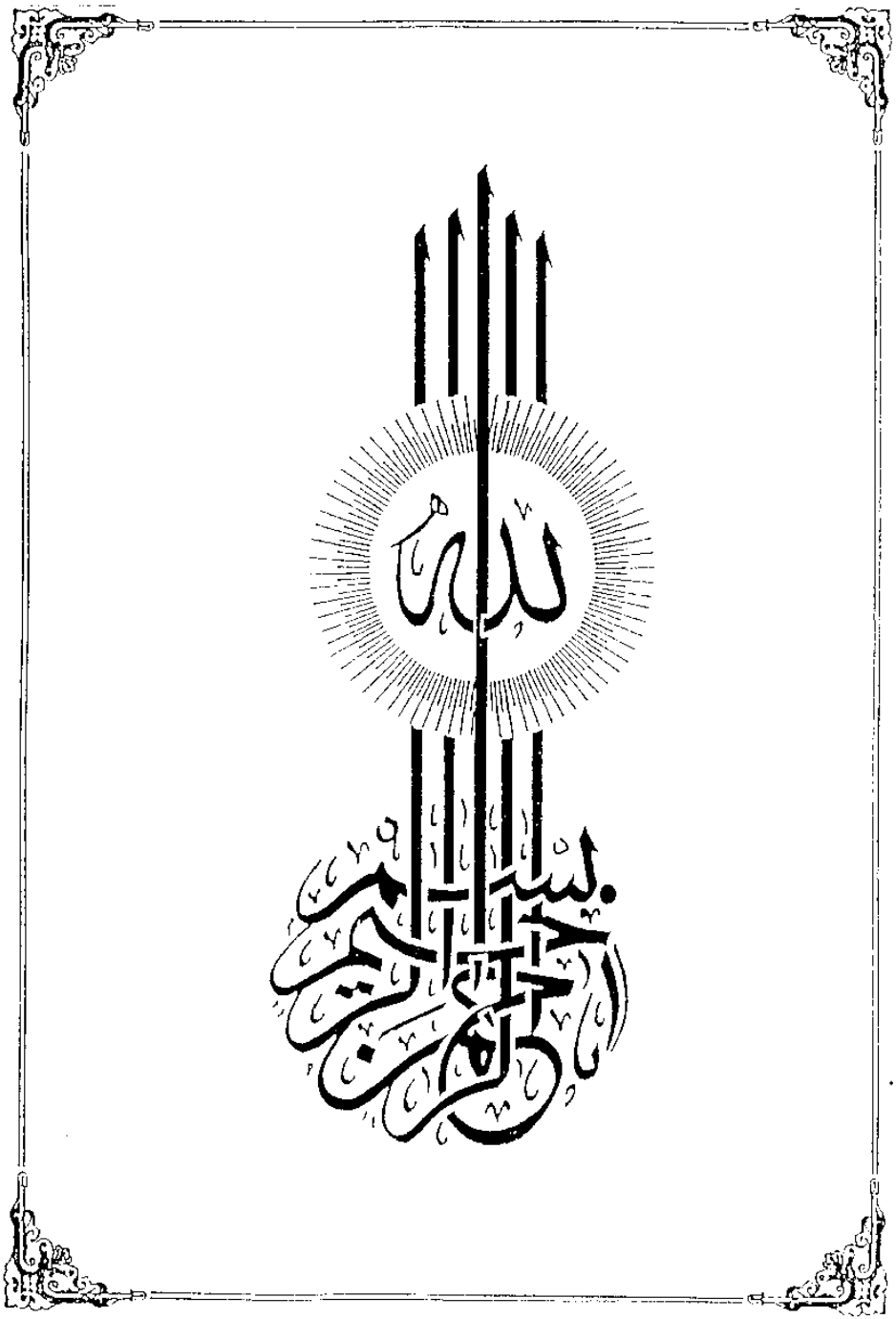

TO MY WIFE ...

DR. WEGDAN HELMY MAWLANA

&

TO MY KIDS ...

AMR & SHERIF

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Contents

Abbreviations:

AF	Atrial Fibrillation
ARDS	Adult Respiratory Distress Syndrome
AVR	Aortic Valve Replacement
CABG	Coronary artery Bypass Grafting
COP	Cardiac Output
CPB	Cardiopulmonary bypass
ECMO	Extra-Corporeal Membrane Oxygenator
EF	Ejection Fraction
GIT	Gastrointestinal Tract
IVC	Inferior Vena Cava
LA	Left Atrium
LL	Lower Limb
LV	Left Ventricle
MR	Mitral Regurgitation
MVR	Mitral Valve Replacement
NSR	Normal Sinus Rhythm
NYHA	New York Heart Association classification
PL	Posterior Leaflet
PM	Papillary Muscle
RA	Right Atrium
SF	Shortening Fraction
SVC	Superior Vena Cava
TEE	Transesophageal Echocardiography
TR	Tricuspid Regurgitation
TTE	Transthoracic Echocardiography

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Review of Literature

Review of Literature

The increasing population of patients requiring mitral valve operations has made it clear to the surgeons that successful operation needs excellent exposure of this valve.

Over the last 30 years, surgical exposure of the mitral valve has challenged surgeons and several approaches have been devised. However, these conventional techniques have failed to totally solve this problem.

The growing need and interest to perform mitral valve reparative techniques and problems facing surgeons during mitral valve reoperations have led to reexamine the various approaches to the mitral valve.

In 1961, Saksena et al., started solving this problem by using the superior approach which gave good exposure when the left atrium is large, then he was followed by **Meyer et al., in 1965** who used the same technique in a large number of their patients. **In 1965, Bowman and Miam** started to use the transseptal technique by a septal incision was made in the cranio-caudal diameter of the stretched fossa ovalis. **In 1966, Dubost** used the biatrial transseptal incision which is known by his name and it is started in the left atrium at its junction with the right superior pulmonary vein , then it is extended medially across the left atrium, interatrial septum and the right atrial wall. **Murtra et al., in 1975,** followed **Bowman and Miam** by making the transseptal incision in the cranio-caudal diameter of the stretched fossa ovalis. Later on, the inverted T-incision was first described by **Brawley in 1980** as the incision was started by a vertical incision between the two caval cannulas on the right atrial wall and was connected to the standard left atriotomy incision, then the left atrial septum was divided from