بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / مني مغربي أحمد

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

ملاحظات: لا يوجد

Ain Shams Experience in Tricuspid Valve Intervention in Mitral Valve Replacement Cases

Thesis

Submitted for Partial Fulfilment of Master degree in Cardiothoracic Surgery

By

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2022

سورة البقرة الآية: ٣٢

Acknowledgment

First and foremost, I feel always indebted to ALLAH, the Most Kind and Most Merciful.

I'd like to express my respectful thanks and profound gratitude to ***Prof. Mostafa Abdel-Azim Abdel-Gawad,*** *Professor of Cardiothoracic Surgery - Faculty of Medicine- Ain Shams University for his keen guidance, kind supervision, valuable advice and continuous encouragement, which made possible the completion of this work.*

I am also delighted to express my deepest gratitude and thanks to ***Prof. Yasser Mahmoud Elnahas,*** *Professor of Cardiothoracic Surgery, Faculty of Medicine, Ain Shams University, for his kind care, continuous supervision, valuable instructions, constant help and great assistance throughout this work.*

I am deeply thankful to ***Dr. Mohamed Ahmed Gamal Mostafa,*** *Lecturer of Cardiothoracic Surgery, Faculty of Medicine, Ain Shams University, for her great help, active participation and guidance.*

I would like to express my hearty thanks to all my family for their support till this work was completed.

Last but not least my sincere thanks and appreciation to all patients participated in this study.

Ahmed Hesham Ghobara

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List of Abbreviations

Abb.	Full term
2D	*Two dimensional*
ATL	*Anterior tricuspid leaflet*
AV	*Atrioventricular*
AVN	*Atrioventricular node*
AVN	*Atrioventricular node*
CMR	*Cardiac magnetic resonance*
CW	*Continuous wave Doppler*
EROA	*Effective regurgitant orifice area*
FTR	*Functional tricuspid regurgitation*
HJR	*Hepatojugular reflux*
JVD	*Jugular venous distention*
LV	*left ventricular*
LVEF	*Left ventricular ejection fraction*
mPAP	*Mean pulmonary arterial pressure*
mRVSP	*Mean right ventricular systolic pressure*
NYHA	*New York Heart Association*
PISA	*Proximal isovelocity surface area*
PM	*Papillary muscles*
PMC	*Percutaneous mitral commissurotomy*
PTL	*Posterior tricuspid leaflet*
R vol	*Regurgitant volume*
RA	*Right atrium*
RR	*Risk ratio*

List of Abbreviations *(Cont...)*

Abb.	Full term
RV	*Right ventricular*
SM	*Systolic murmur*
STL	*Septal tricuspid*
TA	*Tricuspid annulus*
TL	*Tricuspid valve leaflets*
TR	*Tricuspid regurgitation*
TV	*Tricuspid valve*
TVR	*Tricuspid valve replacement*
VC	*Vena contracta*

INTRODUCTION

Tricuspid valve diseases are classified into organic and functional etiologies. Functional or secondary tricuspid valve regurgitation (TR) occurs in patients with advanced mitral valve disease and pulmonary hypertension.

Organic tricuspid valve diseases include rheumatic tricuspid valve disease, which commonly results in stenosis as well as regurgitation. Degenerative TR is less common.

In patients with longstanding mitral stenosis and pulmonary hypertension, right ventricular dilatation ensues, and consequently the tricuspid valve annulus also dilates. This results in the failure of proper coaptation of tricuspid leaflets although they are normal in appearance ***(Matsuyama, 2003; Supino et al., 2006).***

Tricuspid regurgitation most commonly occurs as a result of left heart insufficiency in patients with mitral or aortic valve disease and is caused by subsequent right ventricular and tricuspid annular dilatation, displacement of papillary muscles, and leaflet tethering. Thus, the majority of the patients who require TV surgery undergo concomitant mitral and/or aortic valve surgery ***(Dominik and Zacek, 2010).***

TV surgery is recommended for symptomatic patients with the signs of right heart failure and severe TV regurgitation, but there is growing evidence that even patients presenting with

annular dilatation without significant regurgitation benefit from valve repair. Uncorrected moderate and severe TR may persist or even worsen after mitral valve surgery, leading to progressive heart failure and death. Functional TV regurgitation is primarily treated by annuloplasty. Valve replacement is rarely necessary. However, there is an ongoing debate on whether the TV should be repaired using either a suture-based or prosthetic ring annuloplasty ***(Kaiser et al., 2007).***

Aim of the Work

The aim of this work is to compare the early and late outcomes for patients undergoing TV repair with De Vega annuloplasty, Kay suture, ring annuloplasty and TV replacement on measures of intra-operative data, ICU complications and outcomes regarding symptoms, signs and Echo, early and late.