

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



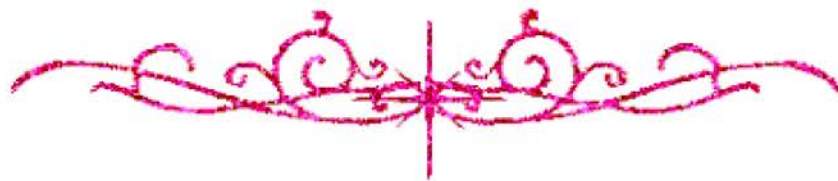
يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



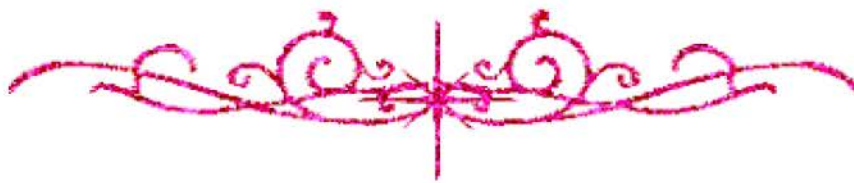


بالرسالة صفحات
لم ترد بالأصل





بعض الوثائق الأصلية تالفة



Efficacy And Safety Of PTMV In Patients With Subvalvular Disease Using Various Techniques

B M V V A

Thesis

Submitted For Partial Fulfillment Of the MD in Cardiology

Presented By

Mohammed Abbas Morsy

M.B. B.Ch., M.Sc. Cardiology

Supervised By

Prof. Heba Abd El-Kader Mansour

Prof. Of cardiology
Benha University

Prof. Saad Amar

Prof. Of cardiology
Benha University

Dr. Metwally El Emary

Lecturer Of cardiology
Benha University

Dr. Ahmad Fathy

Consultant Of cardiology
National Heart Institute

Faculty of Medicine

Benha university

2003

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ ❀ خَلَقَ الْإِنْسَانَ
من علق ❀ اِقْرَأْ وَرَبُّكَ الْأَكْرَمُ ❀ الَّذِي عَلَّمَ
بِالْقَلَمِ ❀ عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ ❀

صَلَّى اللَّهُ عَلَى الْعَلِيِّ

﴿سورة العلق الآيات 1-5﴾

Dedication

To my parents

Whom learnt me the basis of life

Acknowledgment

The ability to achieve this is attributed first and foremost to **ALLAH**, the Gracious, who helped us to accomplish this endeavor, and for granting me with kind wonderful persons in our teamwork that without their magnificent effort, this work would have never been brought to light.

I would like to express my sincere thanks and deepest gratitude to **Prof. Heba Abd El-Kader Mansour**, Professor of Cardiology Benha University, for her continuous support and extreme effort during this work.

I am also in debt to **Prof. Saad Amar**, Prof. Of Cardiology Benha University, for his guidance and effort to carry on with this study. His support has helped me a lot throughout this work.

My thanks are also due to **Dr. Metwaly El Emary**, Lecturer of Cardiology Benha University, for his enormous guidance, continuous support, experienced supervision and sincere unlimited advice in the completion of this work.

I also would like to thank **Dr. Ahmad Fathy**, Consultant of cardiology National Heart Institute, who deserves utmost recognition for his outstanding effort and professional expertise, which are at the very “heart” of this work, and was incredibly devoted to making this study a reality.

Contents

	Page
Introduction and Aim Of The Work .	1-3
Review of Literature	4
(1) • Definitions of M.S.	4
• Anatomy of Mitral Valve apparatus.	4
• Pathology of M.S.	8
• Pathophysiology of M.S.	10
• Role of Echo in evaluation of patients undergoes mitral balloon commissurotomy	13
• Natural history of mitral stenosis.	47
(2) • Historical background of Percutaneous Mitral Valve Commissurotomy.	52
• Indications Of PTMC.	54
• Contraindications Of PTMC.	55
(3) • Different techniques of PMVC (Inoue, Multi Track and Mechanical Mitral Commissurotomy)	58
Material and Methods.	130
Results	138
Discussion	169
Summary	187
Conclusions	190
References	191
Arabic Summary	

List of Tables

	Page
Table (1) : Wilkins' Score	18
Table (2) : Reid score	20
Table (3) : Nobuyoshi Score	21
Table (4) : Complications of MBC detected by two – dimensional Doppler echocardiography.	36
Table(5) : Baseline Variables associated with long term adverse results after MBC.	41
Table (6) :Role of two – dimensional Doppler echocardiography in the evaluation of patients undergoing BMC.:	43
Table (7) : Acc / AHA recommendations for PMPC.	51
Table (8) : Criteria For Patient selection and. <i>Contraindications to PTMC.</i>	57
Table(9) :Major Complications of BMC.	80
Table (10) : Minor Complications of BMC.	81
Table(11) :Causes and incidence of Procedure related deaths.	82
Table (12) : Incidence of serious complications.	83
Table (13) : Incidence of MR after BMV..	84
Table (14) : Echocardiographic score prediction of development of severe MR following PMV.	86
Table (15) : Reports of ASD following BMV..	89
Table (16) : Incidence of Cardiac tamponade in patients undergoing BMV..	94
Table (17) :Complications of BMV.	95
Table (18) : Multi-Track balloon & rapid exchange catheter sizing chart.	119
Table (19) :Global results of BMV using the Multi-Track system technique.	128
Table (I) : Demographic Baseline and clinical data before PMC.	139
Table (II) : Mean and standard deviation of MVA (Pre dilatation) among the three studied groups.	144

Table (III) : Mean and standard deviation of MVA (Post dilatation) among the three studied groups.	145
Table (IV) : Mean and standard deviation of mean transmitral gradient (predilatation) among the three studied groups	146
Table (V) : Mean and standard deviation of mean transmitral gradient (postdilatation) among the three studied groups.	147
Table (VI) : Mean and standard deviation of mean diastolic pressure gradient (Pre dilatation) among the three studied groups).	149
Table (VII) : Mean and standard deviation of mean diastolic pressure gradient (Post dilatation) among the three studied groups).	150
Table (VIII) : Mean and standard deviation of MLA Pressure (Pre dilatation) among the three studied groups.	152
Table (IX) : Mean and standard deviation of MLA Pressure (Post dilatation) among the three studied groups.	153
Table (X) : Mean and standard deviation of mean PAP (Pre dilatation) among the three studied groups.	155
Table (XI) : Mean and standard deviation of mean PAP (Post dilatation) among the three studied groups.	156
Table (XII) : Comparison between Pre & post dilatation data in Inoue group.	157
Table (XIII) : Comparison between Pre & post dilatation data in Multi – Track group.	158
Table (XIV) : Comparison between Pre & post dilatation data in Metallic Valvulotome.	159
Table (XV) : Doppler Echo data after PMC and after one Month follow up.	163

List of Pictures

	Page
Picture (1) : Trans septal puncture.	72
Picture (2) : Passage of the wire through interatrial septum into the left atrium.	73
Picture (3) : Orientation of the Catheter balloon by the stylet toward mitral valve	74
Picture(4) : Full dilatation of the valve by fully dilated balloon and disappearance of the waist	77
Picture (5) : Transseptal catheterization	104
Picture (6) : Passage of the wire across the interatrial septum into left atrium.	107
Picture (7) : Positioning of the guidewire into the left ventricle towards its outflow tract.	109
Picture (8) : Dilatation of the interatrial septum	110
Picture (9) : Opening of the commissurotome and valvular dilatation	111
Picture (10) : Transseptal puncture and dilatation of the inter atrial septum.	121
Picture (11) : Passage of the balloon through Mullin sheath into the left ventricle	122
Picture (12) : Passage of the wire across mitral valve into the left ventricle	124
Picture (13) : Simultaneons inflation of both balloon across the mitral valve without residual waist	125

List of Figures

	Page
Figure (1) : Description of the Metallic Valvulotome	102
Figure (2) : Description of the Multi-Track kit	117
Figure (3) : Passage of the balloon catheter and position of the guide wire.	123
Figure (4) : (A)The second balloon is advanced over the wire and lined up with the first one and inflated simultaneously (B)	126
Figure (I) : Number and Percent distribution of NYHA Functional class among the three studied groups.	141
Figure (II) : Number and Percent distribution of sub valvular score among the three studied groups.	142
Figure (III) : Comparison between MVA Pre and Post dilatation	164
Figure (IV) : Comparison between mean PAP Pre and Post dilatation among the three studied groups.	165
Figure (V) : Comparison between Mean diastolic pressure gradient Pre and Post dilatation among the three studied groups.	166
Figure (VI) : Comparison between MLA Pre and Post dilatation among the three studied groups.	167
Figure(VII) : Comparison between Mean transmitral gradient Pre and Post dilatation among the three studied groups.	168

List of Diagrams

	Page
Diagram (1) : Technique of Percutaneous Mechanical Mitral Commissurotomy (PMMC) Transseptal Catheterization	105
Diagram (2) : Positioning of the guide wire into the left ventricle.	106
Diagram (3) : Dilatation of the interatrial septum.	111
Diagram (4) : Crossing the mitral valve and mitral commissurotomy.	112