

List of contents

Title	Page No
Dedication	i
Acknowledgement	ii
Abstract(English)	iii
Abstract(Arabic)	iv
List of contents	v-vi
List of tables	vii
List of figures	viii
List of Abbreviations	ix
Chapter One (Introduction)	
1.1 Background	1
1.2 Problem of the study	2
1.3.1 General objectives	2
1.3.2 Specific objectives	2
1.4 Study layout	2
1.5 Significance of the study	2
Chapter Two (Literature Review and previous studies)	
2.1.1 Anatomy	3-4
2.1.2 Physiology of MV	5
2.1.3 The display of normal movement of the MV leaflets by M-mode and 2-D echo	5-6
2.1.4 Mitral valve stenosis (MS)	7
2.1.4.1 Pathophysiology	7-8
2.1.4.2 Clinical Features	8
2.1.4.3 Physical examination	8
2.1.4.4 M-mode criteria of Mitral valve stenosis MS	8
2.1.4.5 Two-dimensional criteria of mitral stenosis	8-9
2.1.4.6 The pattern of normal and stenosed mitral valve leaflets in short axis view	9
2.1.4.7 Changes in MV area with severity of mitral valve stenosis (MS)	10
2.1.4.8 Doppler evaluation of mitral stenosis	10-11
2.1.4.10 Pressure Gradients	11
2.1.4.11.1 Planimetry	12
2.1.4.11.2 Pressure Half-Time (P1/2)	12-13
2.1.4.12 Aortic regurgitation (AR)	14
2.2 Previous studies	14-15
Chapter Three(Materials and Methods)	
3.1 Materials	16-17
3.1.1 Sample of the study	16
3.1.2 Duration of the study	16
3.1.3 Area of the study	16
3.1.4 Data analysis	16

3.1.5 Data collection	16
3.1.6 Machines used	17
3.2.1.1 Windows used to display the MV	17
3.2 Methods	17
3.2.1 Techniques used	17
3.2.1.1 Windows used to display the MV	17
3.2.1.2 Examinations done to show the mitral valve (MV)	18
3.2.1.2.1 2-D echo	18
3.2.1.2.1 2.1 In left parasternal window	18
3.2.1.2.1 2.1.1 Long-axis view	18
3.2.1.2.1 2.1.2. Short-axis view	18
3.2.1.2.1 2.2 In the apical window	18
3.2.1.2.1 2.3 In the subcostal window	18
3.2.1.2.2 Motion or M-mode echo	18
3.2.1.2.3 Doppler echo	18
Chapter Four (Results)	
Results	19-31
Chapter Five (Discussion, conclusion and recommendation)	
5.1 Discussion	32-36
5.2 Conclusion	37
5.3 Recommendation	38
References	39-40
Appendices	41-44