CONTENTS

SL. NO.	DETAILS	PAGE NO.
1.0	INTRODUCTION	1 - 23
1.1	DEFINITION OF SCI	1
1.2	MECHANISM OF INJURY	2-5
1.3	BURDEN OF SCI	6 - 10
1.3.1	GLOBAL PREVALENCE	6 - 7
1.3.2	INDIAN PREVALENCE	8
1.3.3	ECONOMIC BURDEN OF SCI	8 – 9
1.3.4	SCI AS SOCIAL BURDEN	10
1.4	DIAGNOSIS OF SCI	11 - 13
1.5	CLASSIFICATION OF SCI	13 - 15
1.5.1	NEUROLOGICAL CLASSIFICATION	13 - 14
1.5.2	FUNCTIONAL CLASSIFICATION	15
1.6	PATHOPHYSIOLOGY OF SCI	16 - 19
1.7	CONVENTIONAL MANAGEMENT OF SCI	19 - 21
1.8	YOGA FOR SCI	21 - 22
1.9	NEED OF THE STUDY	23
2.0	LITERARY RESEARCH FROM ANCIENT SCRIPTURES	24 - 60
2.1	AIM	23
2.2	OBJECTIVES	23
2.3	INTRODUCTION	23

2.3.1	ĀYURVEDA	24
2.3.2	DEFINITION OF HEALTH ACCORDING TO ÄYURVEDA:	24 - 25
2.3.3	AIM OF ÄYURVEDA	25
2.3.4	DOŞA	26
2.3.5	CLASSIFICATION OF DOŞA	26 – 27
2.4	METHODOLOGY OF THE STUDY	28 - 60
2.5	DISCUSSION	58 – 59
2.6	CONCLUSION	59 - 60
3.0	REVIEW OF SCIENTIFIC LITERATURE	61 - 70
3.1	EPIDEMIOLOGY OF SCI	61 – 62
3.2	SCI INCIDENCE AND PREVALENCE	62
	BARRIERS IN NEURONAL	
3.3	REGENERATION/FUNCTIONAL	63
	RECOVERY IN SCI	
3.4	SCI AND CHRONIC INFLAMMATION	63
3.5	SCI AND SENSORY-MOTOR IMPAIRMENT	64
3.6	SCI AND RISK OF OBESITY	64
3.7	SCI AND PSYCHOLOGICAL DISTRESS	64
3.8	YOGA AS A THERAPEUTIC TOOL	64 - 66
3.9	NEUROPSYCHIATRIC ILLNESSES AND	67 – 68
3.7	YOGA THERAPY	07 – 08
3.10	REHABILITATION OF SCI PATIENTS:	68 - 69
3.10	POTENTIAL OF YOGA	00-09
3.11	SUMMARY TABLE	69 - 70

4.0	AIM AND OBJECTIVES	71 – 72
4.1	AIMS OF THE STUDY	71
4.2	OBJECTIVES OF THE STUDY:	71
4.3	HYPOTHESIS AND NULL HYPOTHESIS	71
4.4	JUSTIFICATION OF THE STUDY	72
5.0	METHODS	73 – 91
5.1	PARTICIPANTS	73 - 75
5.1.1	SAMPLE SIZE	73
5.1.2	SELECTION AND SOURCE OF PARTICIPANTS	73
5.1.3	INCLUSION CRITERIA	73
5.1.4	EXCLUSION CRITERIA	74
5.1.5	ETHICAL CONSIDERATION	74
5.1.6	SCREENING TOOL	74 - 75
5.2	DESIGN OF THE STUDY	76
5.2.1	RANDOMIZATION	76
5.2.2	BLINDING	76
5.3	VARIABLES STUDIED	78 - 87
5.4	INTERVENTIONS	88 – 90
5.5	DATA EXTRACTION	91
5.6	DATA ANALYSIS	91
6.0	RESULTS	92 – 105

7.0	DISCUSSIONS	106
7.1	SUMMARY	101
7.2	MECHANISM	101 - 106
7.2.1	EFFECT OF ADD-ON OF YOGA ON PSYCHOLOGICAL PARAMETERS IN SCI PATIENTS	101 – 102
7.2.2	EFFECT OF ADD-ON OF YOGA ON INFLAMMATORY MARKERS IN SCI PATIENTS	102 – 103
7.2.3	EFFECT OF ADD-ON OF YOGA ON GAIT AND FUNCTIONAL INDEPENDENCE IN SCI PATIENTS	103 – 104
7.2.4	EFFECT OF ADD-ON OF YOGA ON SPASTICITY AND METABOLISM IN SCI PATIENTS	104 - 106
2.0		
8.0	APPRAISAL	108 - 110
8.0	APPRAISAL SUMMARY OF THE FINDINGS:	108 - 110 108
8.1	SUMMARY OF THE FINDINGS:	108
8.1	SUMMARY OF THE FINDINGS: CONCLUSION	108
8.1 8.2 8.3	SUMMARY OF THE FINDINGS: CONCLUSION IMPLICATIONS OF THE STUDY	108 108 109
8.1 8.2 8.3 8.4	SUMMARY OF THE FINDINGS: CONCLUSION IMPLICATIONS OF THE STUDY APPLICATIONS OF THE STUDY	108 108 109 109
8.1 8.2 8.3 8.4 8.5	SUMMARY OF THE FINDINGS: CONCLUSION IMPLICATIONS OF THE STUDY APPLICATIONS OF THE STUDY STRENGTH OF THE STUDY	108 108 109 109 109
8.1 8.2 8.3 8.4 8.5 8.6	SUMMARY OF THE FINDINGS: CONCLUSION IMPLICATIONS OF THE STUDY APPLICATIONS OF THE STUDY STRENGTH OF THE STUDY LIMITATIONS OF THESTUDY SUGGESTIONS FOR FUTURE	108 108 109 109 109 110

1.0	INSTITUTIONAL ETHICS COMMITTEE APPROVAL	117 - 118
2.0	INFORMED CONSENT FORM	119 – 122
3.0	CLINICAL TRIAL REGISTRY OF INDIA- REGISTRATION FORM	123 – 126
4.0	SOCIO-DEMOGRAPHIC DATA SHEET	127
5.0	MEDICALLY BASED EMOTIONAL DISTRESS SCALE	128 - 131
6.0	SPINAL CORD INDEPENDENCE MEASURE	132 – 133
7.0	QUALITY OF LIFE INDEX- SPINAL CORD INJURY VERSION	134 – 137
8.0	WALKING INDEX FOR SPINAL CORD INJURY II	138 -139
9.0	RAW DATA	140 - 149
10	PLATES	150 - 152
11	LIST OF DOCTORAL PUBLICATIONS FROM THIS THESIS	153

LIST OF TABLES			
Table	Name	Chapter	Page
No	Tame	No	No
1	Mechanism of SCI	1	3
2	Prevalence of traumatic spinal cord injury by Region and Author(s) of published data	1	7
3	Epidemiology of spinal cord injury, literature data	1	10
4	Summary Table of Scientific Research on SCI.	3	65-66

5	The details of yoga therapy practices	5	85
6	Time-table for Physiotherapy group	5	86
7	Time-table for Yoga and Physiotherapy group	5	86
8	Characteristics of the study participants	6	88
9	Within group comparison of categorical variables of IYP	6	96
	and PT groups		
10	Between group comparison of categorical variables of	6	96
	IYP and PT groups		
11	The correlation between age and outcome variables	6	97
12	Within group (Pre-Post) and between groups'	6	99
	comparisons of all continuous variables		
13	Within Group (Pre-Post) Comparison of ASIA, CRP and	6	100
	MMAS Categorical Variables		
	LIST OF FIGURES		
Figure	Name	Chapter	Page
No		No	No
1	Mechanisms of recovery of SCI	1	5
2	Illustrating the Clinical Features of SCI	1	12
3	ASIA scoring sheet for the neurological classification of	1	14
	the SCI		
4	Pathophysiology of traumatic spinal cord injury: This	1	18
	schematic diagram illustrates the composition of normal		
	and injured spinal cord		
5	Summary of secondary injury processes following	1	19
	traumatic spinal cord injury		
6	Immune response in spinal cord injury	1	21
7	Conventional Management of SCI	1	21
8	CONSORT Flow Diagram	5	73
9	Comparison of WISCI II score within the groups	6	90
10	Comparison of SCIM score within the groups	6	90
11	Comparison of ESR score within the groups	6	92
12	Comparison of MPI-SCI score within the groups	6	92

13	Comparison of BMI score within the groups	6	93
14	Comparison of SCI-QoL Index score within the groups	6	94
15	Comparison of MEDS score between the groups	6	94
16	Summarizes possible mechanism for add-on yoga module	7	106 -
	in improving patient outcomes in SCI		107