

CONTENTS

- Introduction:	I
1 - Thoracolumbar Trauma Expert System.....	1
- Knowledge Base for Planning of Diagnosis.....	10
- Algorithm of Treatment Management.....	36
- Rules and Conditions of Neurologic Injuries.....	66
- Rules and Conditions of Osseous Injuries.....	71
2 - Surgical Anatomy of Thoracolumbar Spine.....	92
3 - Biomechanics of Thoracolumbar Spine.....	110
4 - Pathomechanics of Neurologic Injuries	120
5 - Pathomechanics of Osseous Injuries.....	123
6 - Classification of Thoracolumbar Injuries	126
7 - Spinal Stability.....	133
8 - Surgery of Thoracolumbar Injuries	139
9 - Biomechanics of Spinal Instrumentation	145
10- Human Decision - Making Sample Study.....	155
- Material.....	155
- Methods.....	168
- Results	172
- Discussion.....	188
11 - Summary and Conclusions.....	223
12 - References.....	225
13 - Appindex.....	231
14 - Arabic Summary.....	235