Contents

1. Introduction **1**

Etiology 1
Definition 1
Technique 2
Indication 2
Selection Criteria 2
Advantages 2
Disadvantages 3

2. Preoperative Planning **4**

Clinical Assessment 4
Local Examination of Knee Joints 4
Radiological Assessment 5
Various Axes 5
Radiographic Classification of Osteoarthritis of Knee 7
Goal 8
Method to Choose the Exact Location of Mechanical Axis 9
Principle 9
Normal Alignment of Lower Limb 10
Malalignment in Medial Compartment Osteoarthritis of Knee 11
Realignment of Mechanical Axis 11
Detection of Excessive Mechanical Axis Deviation 12
Investigations 14
Physiotherapy 14
Medicines to be Stopped Prior to Surgery 14
Informed Consent for Surgery 14
Preoperative Advice 15
One Day Prior to Surgery 15
On the Day of Surgery 15

3. Description of Fixator **16**

Items Used (Manufactured by SH Pitkar) 16
Items Required 16
Dynamic Axial Fixator (Self-adjusting HTO Clamp) 17

4. Technique of Fixator Application 21

Positioning 21
Scrubbing 21
Draping 21
Assembling of Fixator 22
Application of Schanz Screws 23
Oblique Osteotomy 28
Passing of Guidewire 28
Skin Incision 28
Creating Soft Tissue Tunnel 28
Periosteum Elevation 29
Drilling 32
Osteotomy 33

5. Postoperative Protocols 41

Antibiotics 41
Pain Relief 41
Exercises 41
X-rays 42
Wound Check and Pin Site Care 42
Discharge from Hospital 44
Distraction 44
First Follow-up 46
Second Follow-up 47
Third Follow-up 47
Stopping Distraction 49
Further Follow-ups 50
Fixator Removal 51

6. Summary and Important Points 55

Summary of Surgical Steps 55
Important Points 56
Clinical Photographs 57
Summary of Protocols 58

Bibliography 61

Index 63