

# Contents

<b>1 Introduction</b> .....	1
Joachim Pfeil	
1.1 Development of Surgery in General .....	1
1.1.1 Social Changes.....	1
1.1.2 Technological Development .....	2
1.2 Development of Orthopaedic Surgery .....	2
1.3 Surgical Approaches in Orthopaedics.....	3
1.4 Surgical Approaches to the Hip Joint .....	3
1.5 Minimally Invasive Surgery .....	4
1.6 Conclusions.....	6
1.7 Scope of This Book.....	6
References .....	6
<b>2 Anatomy of the Hip Joint</b> .....	7
Joachim Pfeil	
2.1 Muscles Surrounding the Hip .....	7
2.2 Nerves in the Anatomical Vicinity of the Hip Joint.....	12
2.3 Femoral Nerve .....	12
2.4 Lateral Cutaneous Nerve of the Thigh.....	13
2.5 Superior and Inferior Gluteal Nerves.....	14
2.6 Sciatic Nerve.....	15
References .....	17
<b>3 Complications</b> .....	21
Joachim Pfeil	
3.1 Complications .....	21
3.1.1 Pre- and Intra-Operative Events.....	21
3.1.2 Post-Operative Events.....	22
References .....	22

<b>4 Patient Selection, Indications and Contraindications</b> .....	23
Joachim Pfeil	
4.1 Patient Selection .....	23
4.1.1 Examination.....	23
4.1.2 Indications.....	24
4.1.3 Contraindications .....	24
References .....	25
<b>5 The Anterior Approach</b> .....	27
Etienne Lesur	
5.1 Introduction.....	27
5.2 Patient Selection .....	28
5.2.1 Examination.....	28
5.2.2 Indications.....	28
5.2.3 Contraindications .....	29
5.3 Advantages.....	29
5.4 Disadvantages .....	30
5.5 Patient Positioning/OP Field.....	30
5.5.1 Patient Positioning .....	30
5.5.2 Surgical Instrumentation.....	31
5.5.3 Hip Prosthesis .....	31
5.6 Surgical Technique.....	32
5.6.1 Incision and Approach.....	32
5.6.2 Preparation of the Femoral Neck .....	35
5.6.3 Preparation of the Acetabulum .....	37
5.6.4 Preparation of Femur .....	39
5.6.5 Reduction .....	42
5.6.6 Closure .....	42
5.7 Post-Surgical Care and Rehabilitation .....	42
5.7.1 Immediate Post-Surgical Care .....	42
5.7.2 Physiotherapy.....	43
5.8 Complications .....	43
5.8.1 Pre- and Intra-Operative Events.....	43
5.8.2 Post-Operative Events.....	43
5.9 Personal Experience, Outcome and Success Rate .....	44
References .....	44
<b>6 The Anterolateral Approach with the Patient in Lateral Position</b> .....	47
Werner Siebert	
6.1 Introduction.....	47
6.2 Patient Selection .....	48
6.2.1 Examination.....	48
6.2.2 Indications.....	48
6.2.3 Contraindications .....	48
6.3 Advantages.....	49

6.4	Disadvantages .....	50
6.5	Patient Positioning/OP Field.....	50
6.5.1	Patient Positioning .....	50
6.5.2	Surgical Instrumentation.....	51
6.5.3	Hip Prosthesis .....	51
6.6	Surgical Technique.....	51
6.6.1	Incision and Approach.....	51
6.6.2	Preparation of the Femoral Neck.....	53
6.6.3	Preparation of the Acetabulum .....	54
6.6.4	Preparation of Femur .....	55
6.6.5	Reduction.....	57
6.6.6	Closure .....	59
6.7	Postsurgical Care and Rehabilitation.....	59
6.7.1	Immediate Post Surgical Care.....	59
6.7.2	Physiotherapy.....	59
6.8	Complications .....	59
6.8.1	Pre-and Intraoperative Events.....	59
6.8.2	Postoperative Events.....	60
6.9	Personal Experience, Outcome and Success Rate .....	60
	References.....	61
<b>7</b>	<b>The Anterolateral Approach with the Patient in Supine Position .....</b>	<b>63</b>
	Joachim Pfeil	
7.1	Introduction.....	63
7.2	Patient Selection .....	64
7.2.1	Examination .....	64
7.2.2	Indications.....	64
7.2.3	Contraindications.....	65
7.3	Advantages.....	65
7.4	Disadvantages .....	66
7.5	Patient Positioning/OP Field.....	67
7.5.1	Patient Positioning .....	67
7.5.2	Surgical Instrumentation.....	68
7.5.3	Hip Prosthesis .....	68
7.6	Surgical Technique.....	68
7.6.1	Incision and Approach.....	68
7.6.2	Preparation of the Femoral Neck.....	69
7.6.3	Preparation of the Acetabulum .....	73
7.6.4	Preparation of Femur .....	73
7.6.5	Reduction.....	74
7.6.6	Closure .....	75
7.7	Post-Surgical Care and Rehabilitation.....	75
7.7.1	Immediate Post-Surgical Care .....	75
7.7.2	Physiotherapy.....	75
7.8	Complications .....	76

7.8.1	Pre- and Intra-Operative Events.....	76
7.8.2	Post-Operative Events.....	76
7.9	Personal Experience, Outcome and Success Rate .....	76
	References .....	77
<b>8</b>	<b>The Posterior Approach .....</b>	<b>79</b>
	J. Modaine	
8.1	Introduction.....	79
8.2	Patient Selection .....	80
8.2.1	Examination .....	80
8.2.2	Indications.....	80
8.2.3	Contraindications .....	80
8.3	Advantages.....	81
8.4	Disadvantages .....	81
8.5	Patient Positioning/OP Field.....	81
8.5.1	Patient Positioning .....	81
8.5.2	Surgical Instrumentation.....	82
8.5.3	Hip Prosthesis .....	82
8.6	Surgical Technique.....	83
8.6.1	Incision and Approach .....	83
8.6.2	Preparation of the Femoral Neck .....	84
8.6.3	Preparation of the Acetabulum .....	86
8.6.4	Preparation of the Femur .....	86
8.6.5	Reduction .....	88
8.6.6	Closure .....	89
8.7	Postsurgical Care and Rehabilitation .....	89
8.7.1	Immediate Postsurgical Care .....	89
8.7.2	Physiotherapy.....	90
8.8	Complications .....	90
8.8.1	Pre- and Intra-Operative Events.....	90
8.8.2	Postoperative Events.....	90
8.9	Personal Experience, Outcome and Success Rate .....	91
	References .....	91
<b>9</b>	<b>Epilogue.....</b>	<b>93</b>
	Werner Siebert	
9.1	Trends in Total Hip Arthroplasty .....	93
	References .....	96
<b>Index.....</b>		<b>97</b>