

Pedicle based osteotomy in the treatment of the thoracic and lumbar kyphotic deformities

Thesis

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بسم الله الرحمن الرحيم

سنريهم
آياتنا في
الآفاق و في
أنفسهم حتي
يتبين لهم
أنه الحق

صدق الله العظيم

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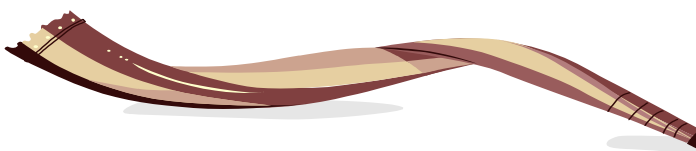
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List of Figures

Figure	Title	Page
Figure (1)	Functional Spinal Unit (FSU).	3
Figure (2)	Osseous anatomy of the vertebrae.	4
Figure (3)	Thoracic pedicle dimensions.	6
Figure (4)	Three-dimensional images of the right pedicle	7
Figure (5)	Ligamentous support of the spine.	9
Figure(6)	Muscle of the back.	11
Figure (7)	Plumb line.	14
Figure (8)	The vertebral column is both strong and flexible as a result of the four alternating curves.	16
Figure (9)	The vertebral motion segment can be divided into anterior and posterior portions.	17
Figure (10)	The posterior portion of the spinal motion segment is responsible for a significant amount of spinal support.	18
Figure (11)	Sagittal- (A), coronal- (B) and axial-plane (C) deformities are the three fundamental deformations that contribute to all spinal deformities.	19
Figure (12)	The six fundamental segmental movements or types of deformation, of the spine along or around the IAR.	21
Figure (13)	A kyphotic deformity showing a Cobb's angle of 58 degrees.	23
Figure (14)	The load-bearing axis.	25
Figure (15)	Sagittal balance & imbalance.	26
Figure (16)	An apical vertebra occurs at the horizon or apex of a curve,	28
Figure (17)	A long implant should usually not terminate at or near an apical vertebra.	29
Figure (18)	In "bringing the spine to the implant" forces that are oriented along any axis or plane may be used.	30
Figure (19)	Bending moments are applied in the sagittal plane by a three-point bending mechanism.	31
Figure (20)	The crossed-rod technique for correcting thoracic and lumbar kyphotic deformities involving the Harrington distraction rod.	33
Figure (21)	The crossed-rod technique.	34

List of Figures

Figure (22)	crossed screw fixation technique	35
Figure (23)	Kyphosis test on hands and knees.	41
Figure (24)	The chin-brow- vertical angle is used to measure the degree of cervical flexion deformity of the spine in patients with ankylosing spondylitis.	42
Figure (25)	Radiographic studies. A: Preoperative lateral standing radiograph demonstrating a 26° focal kyphosis from the superior aspect of L-2 to the inferior aspect of L-3. B: Preoperative three-dimensional CT scan.	45
Figure (26)	The standard (Cobb) measuring technique for the quantification of thoracic kyphosis	47
Figure (27)	For the same preoperative C7 plumb line, the patients with a high PI have a lower SSA (left) than those with a low PI (right)..	49
Figure (28)	Drawing demonstrating relationship between spinopelvic parameters	51
Figure (29)	The spino-sacral angle (SSA)	52
Figure (30)	A: Patients may compensate for fixed spinal deformities with knee and hip flexion. B: Full knee extension reveals the extent of the positive global sagittal imbalance.	56
Figure (31)	Technique for measurement of sagittal imbalance.	57
Figure (32)	Algorithm for choosing the osteotomy type on the basis of the character of the sagittal deformity	58
Figure (33)	The axis for sagittal-plane correction is perpendicular to the long axis of the spinal axis.	59
Figure (34)	Left: Dorsal osteotomy. Center and Right: Egg-shell osteotomy.	60
Figure(35)	Comparison of the pedicle subtraction osteotomy (PSO) with the Smith-Petersen osteotomy (SPO).	63
Figure(36)	VCR diagrams.	66
Figure (37)	Explanation of the central enlargement after closure of a pedicle subtraction osteotomy.	68
Figure (38)	Postoperative computed tomography sagittal reconstructions obtained in a patient with iatrogenic flat-back syndrome.	69
Figure (39)	Graph for Sex distribution.	74
Figure (40)	Graph for Preoperative diagnosis.	75
Figure (41)	Whole spine plane AP and lateral radiograph.	87

List of Figures

Figure (42)	Whole spine plane AP radiograph.	88
Figure (43)	Whole spine plane (a) extension and (b) flexion radiograph.	89
Figure (44)	M.R.I of patient with kyphotic deformity. (A) Ankylosing spondylitis, (B) posttraumatic kyphosis.	90
Figure (45)	Intraoperative positioning during the procedure. Note the flexible table.	93
Figure (46)	Spinal screws.	94
Figure (47)	Spinal screws insertion at different levels with different entries.	94
Figure (48)	Top loading rod system.	95
Figure (49)	Side loading rod system.	95
Figure (50)	Mid line posterior longitudinal approach.	96
Figure (51)	Incision of skin and fascia.	97
Figure (52)	Pedicular Screws Application.	98
Figure (53)	Retraction of the nerve root medial to the pedicle	99
Figure (54)	Preservation of inferior pedicle one third during the osteotomy.	99
Figure (55)	Placement of temporary rod.	100
Figure (56a,b)	Assembling the construct to the rod after extending the table.	101
Figure (57)	Closure of the osteotomy.	102
Figure (58)	The V shaped osteotomy of the dorsal spine.	103
Figure (59)	The lines of partial pedicle subtraction osteotomy	105
Figure (60)	Comparison of traditional PSO and PPSO.	106
Figure (61)	Spinal cord function is monitored using somatosensory evoked potential (SSEP).	108
Figure (62)	Results of ODI in the last follow up 24 months.	115
Figure (63)	Preoperative, 6 weeks, 6 months and last postoperative 24 months ODI.	116
Figure (64)	How to asses' visual analogue scale?	116
Figure (65)	Preoperative, 6 weeks, 6 months and last postoperative visual analogue score.	117
Figure (66)	Intervertebral foramen maintained and union of the osteotomies sites.	119
Figure (67)	Preoperative whole spine AP and lateral x-rays showing ankylosing spondylitis and severe kyphosis.	122
Figure (68)	Lateral view Photograph preoperatively revealing kyphosis.	123
Figure (69)	Front view Photograph preoperatively revealing kyphosis.	124

List of Figures

Figure (70)	Preoperative spinopelvic parameters.	125
Figure (71)	Immediate postoperative AP and lateral radiograph.	126
Figure (72)	3 months postoperative spinopelvic parameters.	127
Figure (73)	Postoperative photograph revealing correction of deformity and forward gaze.	128
Figure (74)	Preoperative whole spine AP radiograph.	130
Figure (75)	Preoperative whole spine lateral radiograph.	131
Figure (76)	Preoperative photograph revealing kyphosis.	132
Figure (77)	Postoperative A.P radiograph.	133
Figure (78)	Postoperative A.P & lateral radiograph.	134
Figure (79)	Postoperative photograph revealing correction of deformity and forward gaze.	135
Figure (80)	Preoperative lateral whole spine radiograph.	137
Figure (81)	Preoperative A.P whole spine radiograph.	138
Figure (82)	Preoperative A.P view of both hips showing bilateral osteoarthritis.	139
Figure (83)	Preoperative M.R.I.	140
Figure (84)	Preoperative photograph revealing kyphosis.	141
Figure (85)	Preoperative photograph revealing kyphosis.	142
Figure (86)	Postoperatively lateral radiograph revealing correction of deformity.	143
Figure (87a87b)	Postoperatively A.P radiograph revealing correction of deformity 0 and 6 months.	144
Figure(88)	AP view showed multilevel laminectomies	146
Figure(89)	Preoperative lateral radiograph revealing sagittal imbalance..	147
Figure(90)	The preoperative MRI showed abnormal appearance of the cord.	148
Figure(91)	Postoperative lateral view shows smooth correction of the curve.	149
Figure(92)	Postoperative lateral view shows smooth correction of the curve.	151
Figure(93)	Preoperative lateral radiograph showing sagittal imbalance.	152
Figure(94)	MRI showed Spondylodiscitis.	153
Figure(95)	Postoperative AP and lateral x ray.	154
Figure(96)	Postoperative lateral x ray.	155

List of tables

Table	Title	Page
Table 1	Physical findings in cervical and thoracic segments.	43
Table 2	Physical findings in lumbar and sacral segments.	44
Table 3	Definitions of spino-pelvic sagittal parameters.	50
Table 4	Patient data.	77,78
Table 5	Oswestry disability index	85
Table 6	Comparison between Pre & Postoperative Cobb's angles.	112
Table7	Comparison between Pre & Postoperative pelvic tilt angle.	112
Table 8	Comparison between pre & postoperative C7 plumb line.	113
Table9	Comparison between pre and post operative ODI 6 months.	114
Table 10	Comparison between pre and post operative ODI 24 months.	114
Table 11	Preoperative and 6 months follow up visual analogue score.	116

List of abbreviations

Abbreviation	Explanation
ALL	Anterior longitudinal ligament.
AP	Anteroposterior.
AS	Ankylosing spondylitis
C7T	C7 tilt.
CK	Congenital kyphosis
CSL	Central sacral line.
FSU	Functional Spinal Unit.
HRL	Horizontal reference line.
IAR	Instantaneous axis of rotation.
LL	Lumbar lordosis.
ODI	Oswestry disability index.
PI	Pelvic incidence.
PLK	Postlaminectomy kyphosis
PLL	Posterior longitudinal ligament.
PPSO	Partial pedicle subtraction osteotomy.
PSO	Pedicle subtraction osteotomy.
PT	Pelvic tilt.
PTK	Posttraumatic kyphosis
SPO	Smith-Petersen osteotomy.
SS	Sacral slope.
SSA	Spino-sacral angle.
SVA	Sagittal vertical axis
TK	Thoracic kyphosis.
VAS	Visual analogue scale.
VB	Vertebral body.
VCR	Vertebral Column Resection.
VRL	Vertical reference line.

Contents

Page

 Introduction.....	1
 Review of Literature	
• Chapter 1: Anatomy.....	3
• Chapter 2: Biomechanics	15
• Chapter 3: Diagnosis of sagittal imbalance.	39
• Chapter 4 : Vertebral osteotomies.....	54
 Patient and methods	74
 Results.....	112
 Case Presentation.....	121
 Discussion	156
 Conclusion and summary.....	166
 References.....	168
 Arabic summary.....	1-2

INTRODUCTION & AIM OF THE WORK

Aim of the work

This is a prospective study aiming to evaluate the efficacy of Pedicle based osteotomy in the treatment of kyphotic deformities in the thoracic and lumbar vertebrae and to illustrate its advantages and disadvantages.

Inclusion criteria:

1. Age group: 6-60 years.
2. Sex: both sexes.
3. Sagittal imbalance >10 to 12 cm.
4. Ankylosing spondylitis.
5. Posttraumatic kyphosis.
6. Congenital kyphosis.
7. Patients with postlaminectomy sagittal imbalance.

Exclusion criteria:

1. Psychiatric disease.
2. Active infection.
3. Osteoporosis.
4. Poor family or social support.

Patients and methods

Patients:

A prospective study will be conducted in Ain Shams University Hospitals including twenty patients with kyphotic deformities. Patients will be managed by pedicle based osteotomy.

Inclusion criteria:

8. Age group: all age groups.
9. Sex: both sexes.
10. Sagittal imbalance >10 to 12 cm.
11. Ankylosing spondylitis.
12. Posttraumatic kyphosis.
13. Congenital kyphosis.
14. Patients with postlaminectomy sagittal imbalance.

Exclusion criteria:

5. Psychiatric disease.
6. Active infection.
7. Osteoporosis.
8. Poor family or social support.