

بسم الله الرحمن الرحيم



SALWA AKL



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



SALWA AKL

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



SALWA AKL



بعض الوثائق الأصلية تالفة



SALWA AKL



بالرسالة صفحات

لم ترد بالأصل



SALWA AKL

B17/03

**Anterior Decompression and
Stabilization of Burst
Thoracolumbar Fractures**

*Thesis Submitted
in Partial Fulfillment of
MD Degree in Orthopedics*

By

Ashraf Salah Anbar

Supervisors

Prof. Youssry Elhawary

Professor of Orthopedic Surgery

Prof. Hassan Elgamal

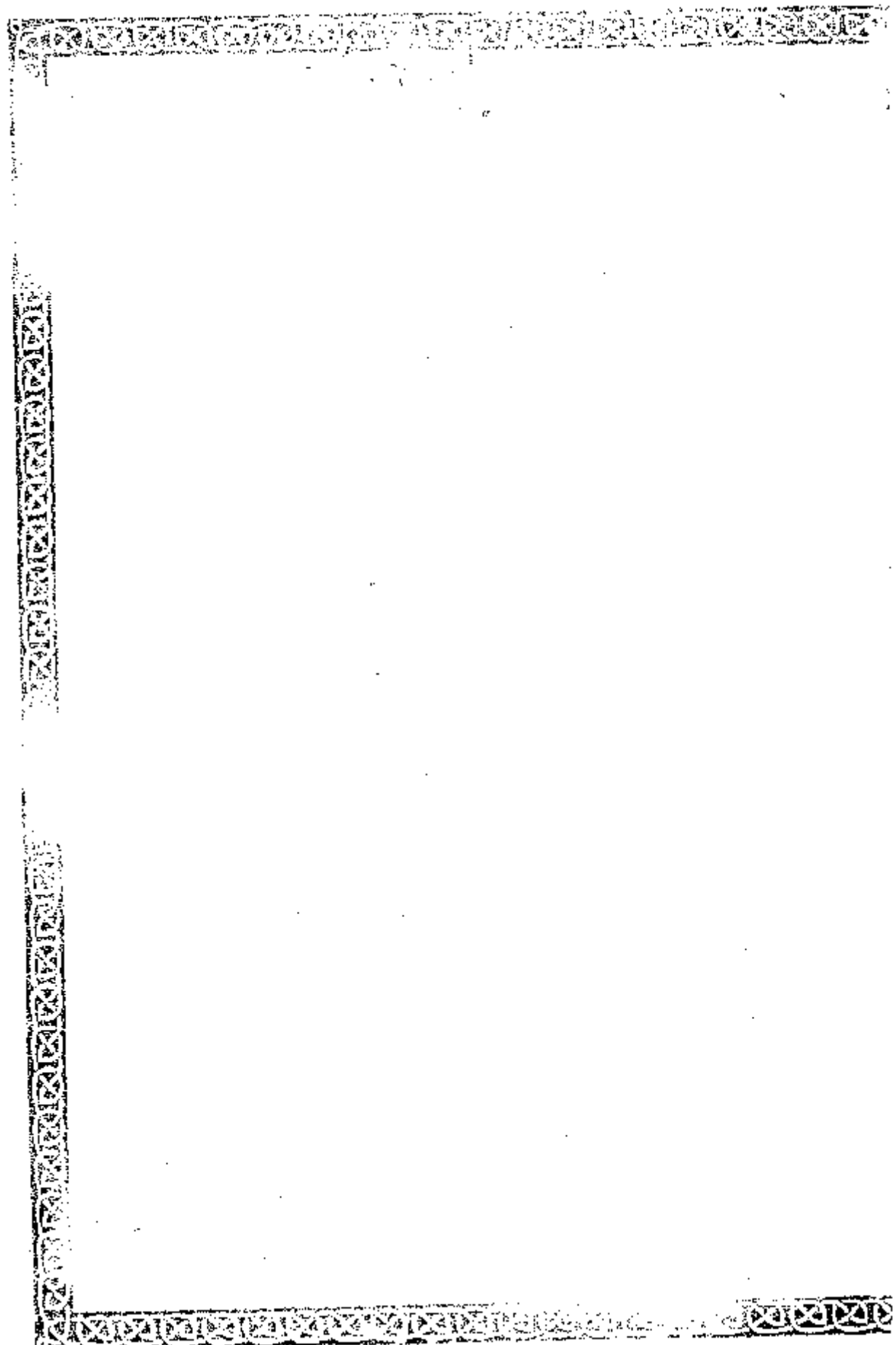
Professor of Orthopedic Surgery

Dr. Sherif Amr

Lecturer of Orthopedic Surgery

Cairo University

2001



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"وَعَلَّمَكَ مَا لَمْ تَكُن تَعْلَمُ وَكَانَ فَضْلُ
اللَّهِ عَلَيْكَ عَظِيمًا"

بِسْمِ اللَّهِ
الرَّحْمَنِ الرَّحِيمِ

Handwritten text, possibly a date or reference number, written vertically on the right margin.

Handwritten text, possibly a date or reference number, located in the upper left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Handwritten text, possibly a date or reference number, located in the middle left area.

Acknowledgements

First and foremost thanks are due to God the most gracious and merciful.

I have the great pleasure to express my faithful gratitude and respect to Prof. Nabil Boray, Professor and Chairman of Orthopedic Surgery Department, Faculty of Medicine, Cairo University, who kindly helped me in approval of the registration of this thesis.

I would like to express my sincerest gratitude and deepest appreciation to Prof. Yousry El-Hawary Professor of Orthopedic Surgery, Faculty of Medicine, Cairo University, for his endless guidance and remarkable thoughts. It's a great honor for me to work under his supervision with his Honesty and Modesty.

It's a great pleasure to express my hearty thanks to Prof. Hassan El-Gamal, Professor of Orthopedic Surgery, Faculty of Medicine, Cairo University, who was generous with his time, advice and experience which enabled me to complete this thesis.

I'd like to express my sincerest gratitude to Dr. Sherif Amr. Lecturer of Orthopedic Surgery, Faculty of Medicine, Cairo University, for his great support and help. I'm so grateful for the valuable time he offered, pushing me forward throughout the whole work (in particular) the experimental part.

I'm greatly indebted to Prof. Mohammad Mohammad Megahed. Professor of Mechanics, Faculty of Engineering, Cairo University, and Dr. Mostafa Abo Hamda, Lecturer of Mechanics, Faculty of Engineering, Cairo University, for their great help and remarkable experience in Biomechanics, without their help this work would not have come to light.

My hearty thanks to Prof. Abdel Mohsen Arafa Professor of Orthopedic Surgery, Faculty of Medicine, Ain Shams University, Prof. Abd El-salam Abd El-Ghaffar and Prof. Yousry El-Hawary Professors of Orthopedic Surgery, Faculty of Medicine, Cairo University, for giving me the honor to discuss this work, occupying some of their valuable and precious time.

My deepest thanks is to Dr. Yasser El-Melegy and Dr. Hosam Salah Lecturers of Orthopedic Surgery, Faculty of Medicine, Cairo University, as well as my colleagues who offered me unlimited support and understanding.

I hope this would be considered a special thank you to you all.

Words will never be enough to express my true gratitude and sincere thanks for my family and my wife.

Finally, I wish this thesis would be helpful in the fields of spinal Surgery and Biomechanical testing.

Abstract

A new Egyptian anterior spinal fixator was made over a period of fourteen months passing through several stages of protodesigns. This device was named Cairo Spinal system (CSS) and it was tested biomechanically and compared with Kaneda. When it proved to be biomechanically efficient, it came into clinical application and was used in the management of thirty patients having burst thoracolumbar fractures (T12-L2). The longest follow up period was eighteen months. No implant failure was reported.

