

Emerging Techniques in Spine Surgery



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Tateru Shiraishi

3. Vertebroplasty using 'AB Needle'

Arvind Bhawe

4. Anterior Spinal Fusion using 'Cage Plate Device'

Jin-Fu Lin

5. Stem Cells in Spinal Cord Injury—Experiment in Mouse

Rosa Margarita Gómez Bello

Emerging Techniques in Spine Surgery

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Emerging Techniques in Spine Surgery

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To
*All my Guru and Teachers
without whom this journey in
“Emerging Techniques”
would not have been possible*

Foreword

The landmark book on spinal diseases and treatment offers a comprehensive text on standard of care treatments as well as innovative and cutting edge technology from Percutaneous Endoscopic Thoracic Discectomy (PELD) to complex internal kyphectomy for deformity. It does justice to the highly scientific and molecular basics of stem cell research and clinical applications. The book is written by the pioneers or highly experienced practitioners in spine surgery with an international scope of authors in a well written and readable style to capture the eager reader.

The intended target audience is very broad ranging from the orthopedic/neurosurgical resident or fellow to the surgeon in practice.

It will also serve as a quick reference text for anyone seeking additional information and literature on spinal disorders and current treatment concepts.

A great effort has been made to replete the chapters with concise and easy-to-comprehend figures and tables to complement text material.

Equally impressive is the surgical technique sections which put the icing on the cake for this textbook considering the explosion of enduring materials in the market. It is a pleasure to have a text that covers the mundane to the basics of spine pathophysiology, biomechanics, and molecular biology and the new frontiers in ever-growing technology yet to become standard practice among spine surgeons all over the world.

This book has an audience in every part of the world where a spine patient resides and does serve to provide a text which can be used as a study guide, workbook, reference book, or operating manual as one sees fit.

It should find a place in every spine surgeon or scientist library.

Bhava as editor and the stellar team of authors should be congratulated for doing a yeoman's work with this superbly organized text for the spine community.



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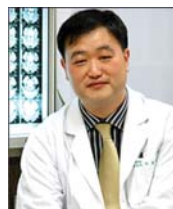
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Preface

The book on *Emerging Techniques in Spine Surgery* is a unique collection of articles on new techniques in spine surgery presented by the pioneers or highly experienced practitioners. Each article includes detailed description of the technique, along with discussion pertaining to the procedure and the related case studies. It also gives tips and practical advice to overcome common pitfalls.

This book will serve as a light house for spine surgeons who want to accent their knowledge and exposures to the emerging techniques in spine surgery.

The book is divided in 5 broad sections: Endoscopic Spinal Surgery, Minimally Invasive Spine Surgery, Non-Fusion Technology, Spinal Fixation and Spine Molecular Advances.

DVD which accompanies this book has illustrations of the pioneer surgeons performing the surgical procedures, which will help learning the procedure step by step.

I hope this book will serve as a valuable resource to trainees and spine surgeons all over the world.

Arvind Bhawe

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I sincerely thank from the bottom of my heart:

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Shri Jitendar P Vij and all staff members of Jaypee Brothers Medical Publishers to bring out this book in the shortest possible time.

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