

# **Weill Cornell Medicine**

### Center for Comprehensive Spine Care



ALI BAAJ, M.D.

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#### SURGICAL SPECIALTIES & CLINICAL EXPERTISE

Complex Reconstructive Spine Surgery **Spinal Cord Tumors** Minimally Invasive Spine Surgery Cervical Stenosis Lumbar Stenosis Adult and Pediatric Scoliosis Adult and Pediatric Kyphosis Spondylolisthesis Cranio-Cervical Instability Herniated Disc Spinal Revision Surgery Spinal Trauma Spinal Column Tumors

Dr. Baaj is an award-winning, board-certified neurosurgeon who specializes in spinal surgery, with advanced training and expertise in spinal oncology and complex reconstructive surgery for spinal degenerative disease and deformity. He is accomplished in both minimally invasive spinal surgery and open complex spine surgery, having had training in both orthopedic and neurosurgical spine surgery. Dr. Baaj's diverse practice brings patients from across the country and the world who seek specialized and cutting-edge treatments for their complex spinal conditions in New York City. His team delivers unparalleled care, dedication, and commitment to excellent outcomes and patient satisfaction.

#### TRAINING

Dr. Baai earned both Bachelor's and Master's degrees from Boston University before receiving his MD from the Boston University College of Medicine in 2004. He completed a general surgery internship at Johns Hopkins University in Baltimore, followed by a neurosurgical residency at the University of South Florida in Tampa. Dr. Baaj received further training as a Research Fellow at the Spinal Biomechanics Laboratory at St. Joseph's Hospital/Barrow Neurological Institute in Phoenix and as a Complex Spine Fellow at Johns Hopkins, with an emphasis

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on advanced techniques in spinal tumor resection and spinal reconstruction. He also completed a two-month traveling fellowship in Paris studying advanced techniques for pediatric deformity and scoliosis, with an emphasis on complex spinal cases.

#### **RESEARCH & PUBLICATIONS**

Dr. Baaj has authored more than 100 abstracts, manuscripts, and book chapters, with an emphasis on spinal anatomy, minimally invasive spine surgery, and advanced surgical techniques. His research interests include spinal biomechanics and clinical outcomes studies and he currently serves on the editorial boards of *Clinical Neurology and Neurosurgery* and the *Journal of Spinal Disorders and Techniques*. Dr. Baaj has authored four textbooks: *The Handbook of Spine Surgery*, now in its 2nd edition, *Revision Spine Surgery*, *Surgery of the Thoracic Spine* and *CNS Metastases Diagnosis and Treatment*. Dr. Baaj is an active member of the Scoliosis Research Society, AO Spine, and the CNS/AANS Spine Section and sits on several of their committees.

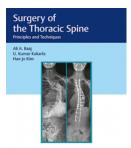
#### **CLINICAL LOCATIONS**

Weill Cornell Medicine Center for Comprehensive Spine Care 240 East 59th Street, 2nd floor (at Second Avenue) New York, NY 10022



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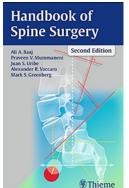
# Weill Cornell Medicine Center for Comprehensive Spine Care



# Surgery of the Thoracic Spine: Principles and Techniques

by Ali A. Baaj, U. Kumar Kakarla, Han Jo Kim This book covers the principles and techniques of spinal surgery specifically on the thoracic spine. These include scoliosis surgery, deformities, tumors, disc disease and trauma.

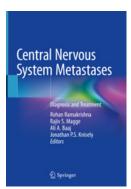
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#### Handbook of Spine Surgery 2nd Edition

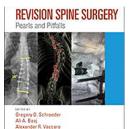
By Ali A Baaj, Praveen V. Mummaneni, Juan S. Uribe, Alexander R. Vaccaro, Mark S. Greenberg

This award-winning book is a favorite among students and trainees. It highlights the major spinal conditions and the most common surgical techniques currently performed in spine surgery, including open complex procedures and minimally invasive spine techniques.



# **Central Nervous System Metastases: Diagnosis and Treatment**

by Rohan Ramakrishna, Rajiv S. Magge, Ali A. Baaj, Jonathan P.S. Knisely This book is dedicated to the diagnosis and treatment of brain and spinal tumors. It covers both surgical and non-surgical options including chemotherapy and radiation therapy. Dr. Baaj edited the spine tumor chapters of this textbook.



#### Revision Spine Surgery: Pearls and Pitfalls by Alexander R. Vaccaro, Ali A. Baaj, Gregory D. Schroeder

This book focuses on revision spine surgery. Many patients may need additional or revision spine procedures and this text covers the principles and techniques needed to safely and effectively perform these.



Dr. Baaj has written and published extensively on spine surgery topics, including degenerative cervical and lumbar disease, spinal tumors and scoliosis. Below are some of his peer-reviewed published manuscripts:

### Myofascial Flap Closure in Treatment for Patients With Craniocervical Instability and Ehlers-Danlos Syndrome.

Lu C, Wald G, Marano AA, Greenfield JP, Baaj AA, Otterburn DM. Ann Plast Surg. 2020 Mar 13. doi: 10.1097/SAP.0000000000002341.

### Spinal alignment, surgery, and outcomes in cervical deformity: A practical guide to aid the spine surgeon.

Tundo F, Avila MJ, Willard L, Fanous S, Curri C, Hussain I, Baaj AA. Clin Neurol Neurosurg. 2019 Oct;185:105496. doi: 10.1016/j. clineuro.2019.105496. Epub 2019 Aug 18. Review.

#### Arachnoid web of the spine: a systematic literature review.

Nisson PL, Hussain I, Härtl R, Kim S, Baaj AA.
J Neurosurg Spine. 2019 Apr 19:1-10. doi: 10.3171/2019.1.SPINE181371.

### A comprehensive review of the diagnosis and management of congenital scoliosis.

Mackel CE, Jada A, Samdani AF, Stephen JH, Bennett JT, Baaj AA, Hwang SW. Childs Nerv Syst. 2018 Nov;34(11):2155-2171. doi: 10.1007/s00381-018-3915-6.
Review

#### Introduction. Pediatric spinal deformity.

Baaj AA, Brockmeyer D, Jea A, Samdani AF.

Neurosurg Focus. 2017 Oct;43(4):E1. doi: 10.3171/2017.7.FOCUS17468.

# Evaluation and management of adolescent idiopathic scoliosis: a review. *Jada A, Mackel CE, Hwang SW, Samdani AF, Stephen JH, Bennett JT, Baaj AA.* Neurosurg Focus. 2017 Oct;43(4):E2. doi: 10.3171/2017.7.FOCUS17297.

Instability in Thoracolumbar Trauma: Is a New Definition Warranted?

Abbasi Fard S, Skoch J, Avila MJ, Patel AS, Sattarov KV, Walter CM, Baaj AA.

Clin Spine Surg. 2017 Oct;30(8):E1046-E1049. doi: 10.1097/

BSD.0000000000000114. Review.

## Outcomes and Complications of Minimally Invasive Surgery of the Lumbar Spine in the Elderly.

Avila MJ, Walter CM, Baaj AA.

Cureus. 2016 Mar 5;8(3):e519. doi: 10.7759/cureus.519.

## Fusion after intradural spine tumor resection in adults: A review of evidence and practices.

Avila MJ, Walter CM, Skoch J, Abbasifard S, Patel AS, Sattarov K, Baaj AA. Clin Neurol Neurosurg. 2015 Nov;138:169-73. doi: 10.1016/j. clineuro.2015.08.020. Epub 2015 Aug 28. Review.

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