

# CURRENT CONCEPTS ON BENIGN SPINAL TUMORS

CONCEITOS ATUAIS SOBRE TUMORES BENIGNOS DA COLUNA VERTEBRAL

CONCEPTOS ACTUALES SOBRE TUMORES BENIGNOS DE LA COLUMNA VERTEBRAL

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We are honored to present the first part of this special edition of *Coluna/Columna Journal*, dedicated entirely to benign primary spinal tumors (BPST). Following the International Spinal Tumor Course organized by the National Institute of Traumatology and Orthopedics (INTO) in 2024 in Rio de Janeiro, we were encouraged by the Brazilian Spine Society (BSS) to collaborate with authors from renowned institutions around the world to publish scientific articles focused on this important topic.

BPSTs are rare and may occur at all any level of the spine, comprising a heterogeneous group that accounts for approximately 4–13% of primary spinal tumors.<sup>1</sup> Treatment modalities vary depending on the type and location of the tumor.<sup>1</sup> Nevertheless, accurate diagnosis of these benign lesions is essential to avoid misinterpretation as more ominous malignant tumors or infections.<sup>2</sup> Despite ongoing advances in diagnosis and therapy, it remains important to revisit foundational concepts that still hold true today—such as “Jaffe’s triangle,” which emphasizes the collaboration of surgeons, pathologists, and radiologists in the diagnosis and treatment of bone tumors.<sup>3</sup>

Several non-operative therapies are available, including pharmacological treatments, injections, embolization, and tumor ablation technologies. Surgical management of BPSTs focuses on local control, including spinal cord decompression and biomechanical stabilization of the spine, while minimizing morbidity.<sup>1,2</sup> The choice of surgical approach is guided by tumor pathology, morphology, and the potential for recurrence or metastatic transformation.<sup>1</sup>

This edition also highlights other key topics such as innovative surgical techniques, management of the vertebral artery, surgical access to the cranivertebral junction, and the prevention and treatment of deformities associated with spinal tumors.<sup>4</sup>

We extend our sincere thanks to all contributing authors for submitting their manuscripts and entrusting us with high-quality research that will assist spine surgeons in adopting the best current treatments. We are also grateful to the editorial team for their dedication and hard work in bringing this edition to fruition.

Evidence level V; expert opinion.

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