

“The Impact of Radiosurgery in the Practice of Neurosurgery and Radiation Therapy - 30 Years Experience”

Antonio De Salles, M.D., Ph.D.

University of California Los Angeles, Emeritus Professor of Neurosurgery and Radiation Oncology, Los Angeles California, HCOR Neuroscience, Sao Paulo Brazil

Stereotactic Radiosurgery was developed based on high technology of Neurosurgery and Radiation Therapy. Stereotactic Neurosurgery provided exquisite knowledge of the central nervous system anatomy and the detailed precision of neurosurgery. Radiation Oncology provided the knowledge of the tissue effects of ionizing radiation to modify CNS abnormal function and destroy neoplasias. The knowledge of these two specialties, when harmonically applied by engaged professionals, has provided during the last 60 years an impact beyond what Neurosurgery or Radiation Oncology alone can achieve. It has spread into the whole body pathologies, mostly related to oncology. Embraced by the patients as a non-invasive means of treating previously untouched human diseases, Radiosurgery has gained acceptance worldwide, proving that high technology indeed avoids or decreases hospital stay, bring patients rapidly to work and maintain families engaged during the patient's treatment. Competing favorably over the traditional surgery, stereotactic radiosurgery is a prototype of minimally invasive and highly effective approach for treatment of difficult diseases of humanity. A technique that depends on early screening diagnosis, prompt treatment and continuous follow up has engaged patients and interested parts alike into a less costly approach to medical care. Stereotactic Radiosurgery has become the central development in Radiation Oncology and a major adjuvant to surgeons, providing the possibility of less complications, parsimonious functional sparing resections and complementation of surgery, maintaining chiefly the patient's function intact.