Radiobiology of Radiosurgery (a neurosurgeon’s perspective)

Radiosurgery has revolutionized Neurosurgery, Radiation Oncology and Medical Physics. The matched surgical results and even superior in many instances with radiation delivery precision asks for novel Radiobiology understanding. At the same time, the accuracy and precision required by stereotactic surgery brought high demands to Medical Physics. These two professionals achievements gave to the Radiation Oncologist the opportunity to decrease the number of fractions in radiation therapy, as precision allows for protection of normal tissue, obviating the need for protracted schemes of radiation preconized by the conventional Radiobiology. The Radiosurgery movement called for a rethinking in Radiobiology, improving effectiveness. It promoted treatment cost decreases and comfort for patients that now enjoy minimally invasive and less prolonged treatments. This Webinar touches in the radiobiological advantages that brought Radiosurgery to the main stream of the three specialties, Neurosurgery, Radiation Oncology and Medical Physics, the multidisciplinary team responsible for Radiosurgery.