Managing non-functioning pituitary neuroendocrine tumors based on the best available evidence

Non-Functioning Pituitary Neuroendocrine Tumors (NF-PitNETs) represent about half of all pituitary neuroendocrine tumors. Being clinically silent, NF-PitNETs are usually discovered as macroadenomas compressing the optic chiasma, the pituitary gland or/and the pituitary stalk. Surgical removal remains the treatment of choice considering almost the absence of an effective medical treatment in contrast to most functioning pituitary tumors. Although the vast majority of NF-PitNETs are benign, their treatment remains a challenge considering that about 50% present with cavernous sinus invasion at the time of diagnosis which limits the radical removal. It is estimated that about half of the patients with invasive NF-PitNETs present regrowth of the residual tumor and about 15% present growth after gross total removal without residue. Inspired from the recent 2017 WHO classification and numerous studies, the term (high risk pituitary adenoma) evolved in the recent years; this includes tumors with increased cell proliferation and signs of invasive growth evaluated by MRI and/or histology. Subsequently, the optimal treatment strategy of NF-PitNETs nowadays should not only consider the choice of surgical technique but also identifying factors which help predicting the risk of recurrence. In this presentation, the author exposes the current surgical techniques and discusses the predictive factors of recurrence and the different management modalities in such cases.

Biography

Sebouh Kassis is a Neurosurgeon and Spine Surgeon. He has completed his Neurosurgical training from the University Hospital of Liege in Belgium where he was graduated with the Highest Distinction Award and became holder of Belgian Board Certificate in Neurosurgery. He has also completed a Fellowship program of 3 years in the Neurological Hospital of Lyon, France and is a holder of French Specialty Certificate for both Neurosurgery and Neurology. He has special interest and expertise in the treatment of pituitary and skull base pathologies with fully endoscopic approaches, microsurgical and minimally invasive treatment of diverse spinal pathologies, spinal fusion including deformity correction. He has also committed to the integration of spinal navigation and neurophysiology monitoring in the management of complex spine cases. He is the Head of the Neurosurgery Department of Al Zahra Private Hospital, Dubai.