

FIRST VAMA DBS Symposium, 26th September 2020, Vama, Bulgaria
Chair Prof. Yavor Enchev

ABSTRACT

Deep Brain Stimulation and the neurocircuitry of depression

Prof. Dr. Volker A. Coenen

Department of Stereotactic and Functional Neurosurgery, Medical Center Freiburg
University, Germany

Since the early 2000s we see a renaissance of psychiatric indications this time not treated with stereotactic lesion surgery (SLS) but with Deep Brain Stimulation (DBS). In the recent years our colleagues from neighboring disciplines (psychiatry, neurology, neuroradiology, neuroanatomy) have described networks involved in pathologies like depression and obsessive-compulsive disorder (OCD). Interestingly, the evolutionary older and subcortical parts are typically left out of these descriptions. Advanced imaging and the inclusion of normative data allows to understand subcortical parts of readily described network relevant for these pathologies. This lecture will give new insights into the corticopetal (bottom-up) ordering principle which appears to be relevant for the basic understanding of these networks. It will further touch on DBS and SLS in these networks and the effects of such surgery.