



Dementia and Pituitary Disorders - A Neurosurgical Perspective

Interview with Garni Barkhoudarian, MD, FAANS

Associate Professor of Neuroscience / Neurosurgery

Co-director: Pacific Pituitary Disorders Center

Director: Pacific Facial Pain Center

Director: Pacific Adult Hydrocephalus Center

Director: Skull-Base and Endoscopic Microdissection Laboratory

Garni Barkhoudarian, MD, FAANS, is a board-certified, fellowship-trained neurosurgeon with a focus on skull base and minimally invasive endoscopic surgery. Dr. Barkhoudarian has particular interest and expertise in pituitary and parasellar tumors, brain tumors, skull-base tumors (including meningiomas, craniopharyngiomas, chordomas and schwannomas), intra-ventricular brain tumors, colloid cysts, trigeminal neuralgia, hemifacial spasm and other vascular compression syndromes. For virtually all tumors and intracranial procedures, Dr. Barkhoudarian applies the keyhole concept of minimizing collateral damage to the brain and its supporting structures using advanced neuroimaging and neuro-navigation techniques along with endoscopy to improve targeting and lesion visualization. Along with Drs. Marisa Chang and Daniel Franc, Dr. Barkhoudarian leads the Pacific Facial Pain Center, which offers a 360-degree approach to trigeminal neuralgia, hemifacial spasm, glossopharyngeal spasm and other facial pain syndromes. This includes medication therapy, percutaneous procedures, stereotactic radiosurgery and endoscopic microvascular decompression of the trigeminal or facial nerves. As Director of the Pacific Adult Hydrocephalus Center, he works with Dr. Daniel Franc to treat patients with various condition involving cerebrospinal fluid anomalies. This includes hydrocephalus (obstructive, acquired and normal pressure), colloid cysts, cerebrospinal fluid leaks, intracranial hypotension and idiopathic intracranial hypertension. Dr. Barkhoudarian's research interests include evaluating outcomes of pituitary and brain tumor surgery. He is also involved in the biomarkers research program for pituitary adenomas, meningiomas and metastatic brain tumors, as well as evaluating potential mechanisms and markers of invasive and atypical tumor progression. He is an investigator in a number of clinical trials

evaluating the efficacy of various medical or chemotherapies for pituitary tumors and malignant brain tumors. As director of the JWCI / PNI Microdissection Anatomy Laboratory, he conducts neuroanatomical analysis, advancing the procedures and technology used for minimally invasive surgery. Research fellows from around the world perform observational fellowships for periods of 3-6 months at a time, allowing them to learn these techniques and apply them in their home countries. In collaboration with Dr. Daniel Kelly, PNI Director, Dr. Barkhoudarian also oversees the Clinical Neurosurgical Fellowship. Career Highlights: Dr. Barkhoudarian graduated from UCLA in 2000 and received his medical education at the University of Michigan Medical School in 2005. He completed his neurosurgical residency at the UCLA Medical Center. He completed a Pituitary and Neuroendoscopy Fellowship with Dr. Edward Laws, at Brigham & Women's Hospital in 2012. He is a member of the American Academy of Neurological Surgeons (AANS), the Congress of Neurological Surgeons (CNS), the International Society of Pituitary Surgeons (ISPS) and the Armenian American Medical Society (AAMS). He is a board member of the Congress of Neurological Surgeons (CNS), where he works with national colleagues to improve research, education and patient care in neurosurgery. He is an advisory board member of the Self-Assessment in Neurological Surgery (SANS) committee, writing questions to help advance the knowledge of neurosurgeons in training and in practice. Additionally, he is vice-chair of the education committee for the CNS, preparing educational content to advance neurosurgical care worldwide.

Dr. Vicken Sepilian is a Reproductive Medicine specialist and is the founder and director of American Fertility Specialists Medical Group. He is double board-certified in Reproductive Endocrinology and Infertility, as well as Obstetrics and Gynecology. Dr. Sepilian has been an active member of the Armenian American Medical Society (AAMS) holding multiple leadership positions, including serving as the President from 2009 to 2013. Dr. Sepilian served as the Chairman of the 11th Armenian Medical World Congress and currently is the President of the Armenian Medical International Congress (AMIC), a nonprofit organization with chapters all over the world, with the aim of coordinating global efforts in improving healthcare in Armenia. Passionate about community education, in 2008, Dr. Sepilian launched the "Your Health" educational TV program aimed at sharing with the community the latest and most important healthcare topics. Since 2008, the show has been making house calls to tens of thousands of viewers helping educate them on preventative care and healthy lifestyles. In 2010, Dr. Sepilian, alongside other civic leaders and the former Mayor of the City of Glendale co-founded the Glendale Health Festival. Dr. Sepilian worked closely with city and state officials and local hospitals to organize this large-scale event with the aim to improve the health of the community. Dr. Sepilian is a strong believer that success and wealth are measured by life's experiences and human interactions and that true happiness and purpose are achieved by giving. Cherished memories include debates about life and death with Dr. Jack Kevorkian, delivering pens to students in villages in Sri Lanka and teaching chess to orphans in Nepal.