



2014 Annual Meeting Summary

The 2014 VHL Alliance Annual Conference was held in Rockville, MD on October 18th. The agenda included eight scientific presentations and a lecture on the Affordable Care Act, a talk on the State of

VHLA, and two facilitated break-out sessions: one for VHL patients and one for family members and caregivers.

Click on title of talk in blue box to access slide set.

Gynecology and Reproductive Health Issues in VHL

Dr. Pamela Stratton from NIH led off with a discussion of female health and pregnancy issues related to VHL. There have been no large-scale studies, so her conclusions are based upon the information currently available. Dr. Stratton recommends that planning a pregnancy is the best way to ensure a healthy mother and baby. Studies suggest that VHL hemangioblastomas may be sensitive to the progestin used in many birth control pills and devices, so a woman with VHL may want limit contraceptive choices to those that are non-hormonal or very low in progesterone. Planning when to become pregnant allows for the woman's health to be optimized by completing all imaging studies and addressing any significant findings prior to pregnancy.

Management of VHL-Associated CNS Hemangioblastoma

Dr. Prashant Chittiboina from NIH discussed management of CNS hemangioblastomas. Hemangioblastomas are benign tumors which do not metastasize but can cause major medical problems for patients with VHL disease. In the Central Nervous System (CNS), they are seen in the back part of the brain, the cerebellum, the brainstem, and the spinal cord. The problems caused by hemangioblastomas are due to increased pressure which results from increased volume due to tumor growth, swelling, or bleeding. Surgery is recommended based upon symptoms, not the actual tumor growth. Removal will usually lead to a reduction in symptoms.

VHL-Associated Retinal Angioma: Features and Management

Dr. Wai Wong from NEI gave an overview of VHL in the eyes. VHL retinal lesions may cause no symptoms when the lesion is small and not leaking. However, if the lesion grows and begins to leak fluid, the surrounding retina can undergo swelling, distortion, and even detachment. When the retina is damaged, it loses its ability to detect light and vision is compromised. Rarely, in very severe cases, the entire eye can be affected to the extent that the intraocular pressure can increase (glaucoma) or become inflamed (uveitis) such that the eye may eventually need to be removed. The key to

maintaining good vision is early detection and treatment of small retinal lesions. This is a reason to do early DNA testing in children and begin a retinal screening program before the onset of symptoms.

As VHL'ers, What You Need to Know about Pheos

Dr. Karel Pacak from NIH presented information about pheochromocytomas. Although experts have not agreed whether the plasma (blood) or urine test is better, Dr. Pacak prefers plasma. When doing a plasma test, it is very important for the patient to lie down and rest 15-20 min after needle insertion before blood is drawn for the plasma test. Although there is lack of reference numbers for children, Dr. Pacak still prefers the plasma test. The urine test is more expensive and difficult to collect properly, especially when collecting samples from children. His take-home messages are: 1) Your doctor needs to understand the tests for pheos; 2) Any time you have surgery, it is important to let them know about pheos; 3) PET scan is becoming the way to diagnose head and neck paragangliomas.

Update on VHLA-Funded Research

Dr. Eric Jonasch from MD Anderson Cancer Center spoke about what is needed to advance VHL research to find a cure, we need: 1) New ways to either replace or repair defective VHL function; 2) Analysis of the other "broken" genes that conspire with VHL loss to cause tumors; 3) Model systems organ specific manifestations. The research grants awarded by VHLA for 2014 go to two researchers pursuing new approaches to cure VHL. Dr. Danny Segal is looking at a drug that may be able to "fix" broken VHL protein, and Dr. Othon Iliopoulos is using an animal model (VHL-mutated zebrafish) to quickly test a number of currently available drugs to find if any are effective for VHL tumors.

Targeted Therapeutics – Approaches in VHL Patients

Dr. Ramprasad Srinivasan from NIH spoke on the role of therapeutic drugs in the management of VHL. Surgery is the standard of care for tumors, but for VHL it is not curative. This means that systemic therapeutic agents should be used, when appropriate, to manage symptoms and delay surgery. Therapeutics must all have acceptable risks and side effects. A major obstacle to finding drugs to treat VHL is that recruiting patients is problematic. Most qualified VHL patients are leading "normal" lives and most drugs have disruptive regimens and side effects. An example is that over 200 patients qualified for a trial run by Drs. Srinivasan and Linehan at NIH, but the majority declined to participate. We need your participation in clinical trials in order to find effective therapeutic treatments for VHL.

Management of VHL- Associated Kidney Cancer

Dr. Adam Metwalli from NCI discussed management of VHL-associated kidney cancer. He explained how removal of kidney tumors prior to the metastatic stage "resets the clock." The average time between surgeries is 50 months following a partial nephrectomy and the need for dialysis is avoided in most cases. Using partial nephrectomy, Dr. Metwalli and his colleagues have found minimal change in pre and post-op renal function. He also addressed the option of radiofrequency ablation (RFA) instead of open surgery. Surgery is actually more nephron-sparing, more accurate, and allows removal of more tumors. Another disadvantage of RFA is that this method does not "reset the clock" as much as a through partial nephrectomy, meaning that there will be a need for another procedure to remove kidney tumors sooner. RFA is also less likely to spare kidney function due to fibrosis following the procedure.

Imaging in VHL: What You Need to Know!

Dr. Peter Choyke of NCI spoke about imaging used to manage VHL. Magnetic resonance imaging (MRI) uses magnetic fields, not ionizing radiation. This means that MRIs do not add to your lifetime radiation exposure. There are two primary drawbacks of MRIs: patient claustrophobia in the closed units, and incompatible implanted devices (such as some heart pacemakers). Computed tomography (CT) scans were used in the past for abdominal imaging. The problem is radiation exposure. Use of contrast agents has resulted in reduced radiation while maintaining image quality. Ultrasound is another option, but the results are dependent upon the technician performing the test, so for most VHL tests, MRIs and CT scans are preferred.

Impact of Affordable Health Care Act / GINA or other issues

Diane Dorman from NORD spoke about the ways in which NORD works with the entire rare disease community to advocate for changes at the federal government level. She emphasized that the Affordable Care Act (ACA) which prevents denial of health insurance coverage based upon pre-existing conditions and eliminates annual or lifetime financial caps on coverage, is only the latest legislation which has benefitted those with rare diseases. Although the ACA is a federal regulation, the actual insurance available varies by state, so it is important to visit: <https://www.rarediseases.org/> NORD worked with the FDA to develop the Orphan Drug Act (lower regulatory requirements for drugs developed to treat rare diseases), and The Genetic Information Non-Discrimination Act (health insurers and employers cannot discriminate on the basis of DNA test results). NORD is now developing a Rare Action Network in order to work with patients to advocate at a state level.