

Meet the HHT Care Team



Manjusha Kumar, MD
Pediatric Hematologist



Charles Nakar, MD
Pediatric Hematologist



Angeli Rampersad, MD
Pediatric Hematologist



Magdalena Lewandowska, MD
Adult Hematologist



Anthony Betbadal, MD
Adult Hematologist



Brandon Hardesty, MD
Adult Hematologist

HHT Clinic Information

8:00 a.m. - 4:30 p.m., Monday through Friday

Indiana Hemophilia & Thrombosis Center
8326 Naab Road
Indianapolis, IN 46260

Please visit us online at www.ihtc.org/hht-clinic and to access our *Patient Portal*

HHT referrals

To make a referral or an appointment at the HHT Clinic, please contact IHTC's HHT Clinic Coordinator. **Genetic counseling is available.**

Direct: 317.871.0000

Toll Free: 1.877.256.8837

Fax: 317.871.0010



Hereditary Hemorrhagic Telangiectasia (HHT): Oral Manifestations





Hereditary Hemorrhagic Telangiectasia (HHT), also known as Osler-Weber-Rendu Syndrome, is an autosomal dominant genetic disorder resulting in abnormal formation of blood vessels; 90% of people with HHT are unaware they have it.

What Dental Professionals Can Do

One of the most common symptoms of HHT is the presence of telangiectasias of the skin and oral cavity which can be found during routine oral examinations. As a dental professional, recognizing the symptoms of HHT prevents complications. Dental care professionals may identify this underdiagnosed disorder by:

Identifying **telangiectasias** that may be present on routine oral examination.

Ask patients about symptoms if telangiectasias are present—such as nosebleeds, anemia, and symptoms of anemia such as fatigue and activity intolerance. Also ask about family history of bleeding—nosebleeds, AVMs and sudden death from ruptured brain aneurysm.

Prevent brain abscesses by prescribing or reinforcing the need for patients to call their HHT physician for prophylactic antibiotics prior to dental cleaning and procedures.

Recommend that the patient call the IHTC to speak with the HHT coordinator and visit the center's HHT Clinic for evaluation at 317.871.0000 or 877.CLOTTER.

Image: "hereditary-hemorrhagic-telangiectasia-62558.jpg". Copyright © 2019 OMICS International – Open Access Publisher. Reproduced under Creative Commons Attribution 4.0 International (CC BY 4.0). Accessed May 6, 2019 at: <https://www.omicsonline.org/italy/hereditary-hemorrhagic-telangiectasia-peer-reviewed-pdf-ppt-articles/>.

Symptoms of HHT

Nosebleeds are the most common symptom of HHT, caused by telangiectasias on the inner surface of the nasal mucosa. The average onset is 12 years of age.

Telangiectasias are malformations of blood vessels that present as small red dots, and are commonly found on the lips, tongue, face and hands.

Arteriovenous Malformation (AVM) are abnormal communications between arteries and veins. They are commonly found in the lungs, brain and liver.

Iron Deficiency Anemia is often present due to blood loss from nosebleeds and gastrointestinal AVMs.

Prophylactic Antibiotics

Approximately 5-10% of patients with pulmonary AVMs develop a brain abscess. This may be preventable by a single dose of prophylactic antibiotics.¹

In accordance with the Cure HHT practice guidelines, it is recommended that individuals with pulmonary AVMs, whether untreated or undiagnosed, **take a single dose of prophylactic antibiotic approximately one hour prior to dental work.** The direct connection of blood vessels and lack of capillary filtration in the lungs places patients at-risk to develop a brain abscess as bacteria enter the blood stream, travel to the brain, and lead to infection.²



Prophylactic antibiotics are recommended for the prevention of brain abscesses in HHT patients with pulmonary AVMs

At the IHTC, we recognize the concern for the development of antibiotic resistance and we continue to evaluate the use of prophylactic antibiotics in an effort to support best practices for patients.

¹ Moradi, M and Adelis, M. (2014, Jan 9). Brain abscess as the first manifestation of pulmonary arteriovenous malformation: A case report. Published online at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3928840/?report=printable>

² Faughnan, ME, et al. International Guidelines for the Diagnosis and Management of Hereditary Hemorrhagic Telangiectasia. J. Med. Genet online at https://curehht.org/wpcontent/uploads/2017/11/HHT_Clinical_Guidelines_JMG.pdf

Image: "HHT_42503.jpg". Copyright © 2018 VisualDx®. All rights reserved