Hereditary Hemorrhagic Telangiectasia

Early Diagnosis of Nasal Mucosal Telangiectasias

Jason S. Hamilton, MD, FACS Director of the Division of Plastic and Reconstructive Surgery Osborne Head and Neck Institute, Los Angeles, CA Ryan Osborne, MD, FACS Director of the Division of Head and Neck Surgery Osborne Head and Neck Institute, Los Angeles, CA

HHT Overview

Hereditary Hemorrhagic Telangiectasia (HHT) is a hereditary disorder characterized by abnormal clusters of fragile capillaries that bleed with minimal agitation. Telangiectasias, commonly involve the nasal mucosa causing recurrent nosebleeds that may be severe enough to require hospitalization, surgical cauterization as well as blood and/or iron transfusions.

Although HHT is a well know disease and is studied in medical training programs, there are few illustrations or pathologic photographs that depict nasal mucosal telangiectasias for clinicians to use as a reference. When working-up the recurrent nosebleed patient, clinicians need to be knowledgeable of the physical exam findings of patients with HHT. For the HHT patient, the best chance of being diagnosed early is if the treating physician is knowledgeable about the disease process including simple identification of what telangiectasias look like in the nose, skin, and mouth.

Clinical Considerations

For ideal visualization of nasal telangiectasias the clinician will need to use a nasal endoscope for complete examination of the nasal cavity. The nasal septum, floor of the nose, and turbinates must all be thoroughly examined as each location may harbor telangiectasias, the common source of recurrent nosebleeds in HHT patients. Other nasal pathologies that may cause nasal irritation and symptoms include a deviated septum, turbinate hypertrophy, and nasal polyps. These pathologies can all be easily diagnosed during the HHT exam for nasal telangiectasias. Treatment usually will include some form of cauterization of the abnormal vessels. Care should be taken to not treat aggressively as overcauterization of the nasal septum can lead to a septal perforation (HHT septal perforation).

Surgeon Comments

Dr. Jason Hamilton, Director of Plastic and Reconstructive Surgery at the Osborne Head and Neck Institute, is double board certified by the American Board of Facial Plastic and Reconstructive Surgery and the American Board of Otolaryngology/Head and Neck Surgery. His extensive training and expertise provide him with a unique perspective to address both functional and aesthetic concerns of the nose.

For more information on hereditary hemorrhagic telangiectasia or septal perforation repair, please contact the Osborne Head and Neck Institute or visit www.perforatedseptum.com.





Figures: HHT associated nasal telangiectasias. Note the dilated nest of capillaries surround by normal pink mucosa of the floor of the nose (above) and nasal septum (below).

Editor In Chief: Alex Fernandez, MS

Corresponding Author: Jason Hamilton, MD, FACS

Osborne Head and Neck Institute

8631 West Third Street, Suite 945E Los Angeles, CA 90048

T: 310-657-0123 (United States)