Bad connections

eople with HHT, hereditary hemorrhagic telangiectasia, suffer diverse health problems because a number of their arteries connect directly to their veins. The locations of these blood vessel malformations dictate patients' conditions. HHT's diverse, not-uncommon symptoms — nosebleeds, fatigue, shortness of breath — often confuse physicians unfamiliar with the disease. Although it may seem merely troublesome early in life, HHT's effects can become more severe, even life-threatening, as a patient ages. The HHT Center at Washington University School of Medicine assembles the multidisciplinary expertise needed to diagnose and treat this complex disease.

National HHT Patient and Family Conference October 22-24, 2010

Sponsored by HHT Foundation International

at Washington University Medical Center

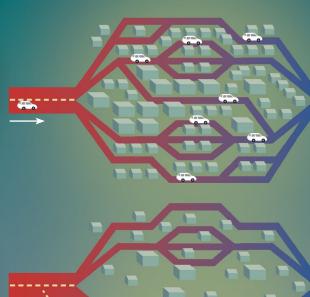
hht.org

Vein

Artery

Arteriovenous Malformation (AVM)

Sidestepping essential functions



Circulation city

The highway driver must enter the city and travel its streets — hopefully stopping along the way to do business. Similarly, arteries feed into beds of tiny

---- capillaries, which then link back to veins. The pulmonary system uses capillaries to exchange oxygen and carbon dioxide for the body.

This city's bypass might shortchange the

Starvation city

local economy if too many travelers use it to sidestep the business district. A circulatory system bypass — a direct artery-to-vein connection called an arteriovenous malformation (AVM) — likewise has consequences. For example, blood traveling through an AVM in a lung is unable to exchange oxygen and carbon

dioxide. And, since the AVM is weaker than a

normal vessel, it can rupture, spilling blood.



This treatment stimulates natural clotting to plug the malformed blood vessel. A specialized team inserts and releases a metallic coil wrapped in synthetic fibers. This occlusion will seal off the problem area and prevent unwanted material from traveling through the AVM.



For many, the disease is very manageable, whereas others have disabling health problems.

hemorrhagic strokes at a young age

> nosebleeds (often daily and profuse)

upture of the malformed blood vessels

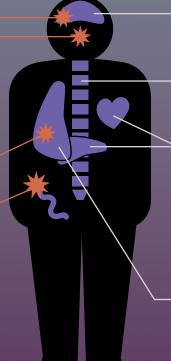
blood leaking into lungs or chest cavity

gastrointestinal tract: loss of blood and anemia

External signs

Small red spots caused by dilated blood vessels on the face, hands or tongue.





brain abscesses spinal vessel AVMs

can cause back pain and loss of function in arms or legs

arteriovenous malformations in the liver can cause heart failure because blood passes too rapidly back to the heart, overloading it

breathing difficulties due to AVMs in the lungs

