

VIVEK IYER: Hello, everyone. My name is Vivek Iyer. I am assistant professor of medicine in the Division of Pulmonary and Critical Care Medicine at Mayo. Thank you for your interest in this article. So the title of our paper is the *Impact of Central Volumes on Outcomes in Patients with HHT*. As an introduction, I want to first introduce HHT. Now, many of you know about this disease. It is hereditary hemorrhagic telangiectasia.

The older name or the other name for this Osler-Weber-Rendu or Weber-Rendu disease. This is basically an autosomal dominant disease that affects angiogenesis in many different vascular beds. Patients typically tend to get telangiectasias. And the most common place you can see this is skin and mucus membranes. So you can almost see a HHT patient, see telangiectasias on the lip, tongue, the inside of their nose, and can diagnose this, along with another cardinal symptom, which is nosebleeds.

Almost everyone will have a first generation family member with the same disease, with HHT, so this is passed on generation to generation, autosomal dominant. And because these telangiectasias can also happen in visceral organs. They can happen in the brain, in the lung, in the liver, and other internal organs, and can really be associated with some pretty serious and devastating complications.

My interest, passion, and love is HHT, a disease that is rare, that you may have encountered in your practice, and something we deal with quite often here at Mayo, because we are one of the HHT centers of excellence around the country, and we follow a lot of patients with this rare disease. What we found is that HHT patients treated at high volume centers, centers that see the top 25th percentile in terms of volume across the country, patients treated at those centers, high-volume centers tend to have better outcomes. And that includes lower mortality at the highest volume centers, lower hospital lengths of stay, lower iatrogenic complication rates.

And this is in spite of the fact that patients treated at these centers are actually sicker than patients treated at low-volume centers. Now why is this even important? We know that physicians and health care providers have not much exposure to HHT during their training. Many physicians and health care providers go through their entire training, Med school, and may have come across HHT once. So the idea was to show that places that deal with this everyday, that have built up expertise in dealing with this, maybe they do a better job at this. And that's what we found.

What we used was something called the NIS, which is the Nationwide Inpatient Survey. So this is a large collection of hospital discharges across the country selected in a random fashion. And we pooled more than 9,000 patients with HHT, and analyzed them based on where they were discharged from, either from high-volume centers or low-volume centers. And so the conclusions of the study were that high-volume centers appear to do a better job at dealing with high-risk, complicated HHT patients, and they do them with lower rates of complications, lower hospital lengths of stay, and also have better outcomes.

I really think that HHT is a disease that requires and deserves more attention, training, exposure through someone's training. And, you know, this can definitely be improved upon. The Cure HHT Foundation actually has a growing network of HHT centers of excellence across the country. So hopefully, these centers will serve as resources for patients service, centers of expertise, and can really provide high value and good care to these patients.

And these patients really can be quite sick and have a number of complications that are quite unique to their disease. And I do wish to thank everyone who has helped me through this, especially all my co-authors, my mentor and friend, Dr. Karen Swanson, Dr. Brinjikji, whose expertise with the NIS database is unparalleled, and all my other co-authors. So thank you again for your interest in this article. This is one of many that we will be publishing on from the NIS database. And thank you for your interest in HHT.

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