

Our findings differ

We congratulate Hudzik and colleagues for their remarkable case of Heyde syndrome;¹ however, our findings differ substantially.² Our patient presented with relapsing gastrointestinal bleeding, angiodysplasia and severe calcific aortic stenosis and declined valve replacement. We started octreotide to reduce the incidence and severity of bleeding relapses and no new gastrointestinal bleeding was diagnosed over more than two years of follow-up. Currently, the patient has stable hemoglobin at 110 g/L, despite recent stenting of the right internal carotid artery, chronic renal failure, urothelial carcinoma of the bladder and adenocarcinoma of the neck.

We acknowledge the evidence pointing to Heyde syndrome as an acquired type IIA von Willebrand syndrome, caused by the loss of the largest polymers of von Willebrand factor (vWF) because of the high shear forces generated through the stenotic aortic valve.³ Work up in our patient failed to disclose any abnormalities of platelets, coagulation parameters or vWF levels and function, both at presentation and at several points during follow-up after the start of octreotide therapy. We did not perform vWF gel electrophoresis, the gold standard to show the loss of large vWF polymers.⁴ Despite this limitation, our findings seem to rule out an acquired type IIA von Willebrand syndrome.

We speculate type IIA von Willebrand syndrome could not provide the underlying mechanistic explanation for the association between aortic stenosis, angiodysplasia and gastrointestinal bleeding in some cases of Heyde syndrome. Additional hypotheses should be investigated in this subset of patients.

Giuseppe Famularo MD, Laura Gasbarrone MD, Giovanni Minisola MD
Hospitalist Physician (Famularo), San Camillo Hospital; Internal Medicine (Gasbarrone, Minisola), San Camillo Hospital, Rome, Italy

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The authors respond

We thank Famularo and colleagues for their comment¹ on our case report.² As mentioned in the article, currently there is no consensus definition of Heyde syndrome. Despite six decades of study, the construct still raises doubts. Several pathophysiologic mechanisms have been implicated in this condition, but an acquired coagulopathy seems most plausible. Nowadays, many authors affirm that Heyde syndrome refers to a triad of aortic stenosis, acquired type IIA von Willebrand syndrome and recurrent bleeding from gastrointestinal angiodysplasia.³⁻⁷ Of note, similar observations were made in patients on mechanical circulatory support using pulsatile flow pumps (loss of high molecular weight multimers of von Willebrand factor).⁸ Notwithstanding, pathophysiology of Heyde syndrome is probably multifactorial (mucosal ischemia, cholesterol embolization, acquired platelet dysfunction and inflammatory reactions).

Regarding the laboratory findings, we have to keep in mind that the most plausible cause of Heyde syndrome is the loss of high molecular weight multimers of von Willebrand factor. Not infrequently, this diathesis can only be identified by gel electrophoresis which is the most sensitive assay.⁹⁻¹¹ Frequently, other tests used in the diagnosis of von Willebrand disease/syndrome turn out normal.⁹⁻¹¹

Famularo and colleagues¹ state they ruled out type IIA von Willebrand syndrome, yet they used octreotide — a drug also used in von Willebrand disease/syndrome to control gastrointestinal bleeding.¹²⁻¹⁵

Ultimately, bleeding from angiodysplasia may reflect an interaction between an uncommon coagulopathy (caused by a common valvular disease) and a common vascular disease of the

gastrointestinal tract. Notwithstanding, proving the association between aortic stenosis and angiodysplasia remains challenging as both entities are common in older patients.

Bartosz Hudzik MD PhD, Krzysztof Wilczek MD PhD, Mariusz Gasior MD PhD
Third Department of Cardiology, Silesian Centre for Heart Disease, Medical University of Silesia, Zabrze, Poland

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Letters to the editor

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