Management of refractory idiopathic thrombocytopenic purpura

A 61-year-old Caucasian female presented to an outpatient clinic with easy bruising and was found to have platelets of 2x10³ /µL. She also reported easy bruising and was noted to have diffuse upper and lower extremity ecchymoses, along with true thrombocytopenia on peripheral smear, earning a diagnosis of idiopathic thrombocytopenic purpura (ITP). Following a failed attempt in quantitative recovery with platelet transfusion, high-dose dexamethasone and intravenous immunoglobulin (IVIG) were also attempted, unsuccessfully. The patient was then given rituximab, after which her platelets again remained low at 2-3 thousand/µL. The patient was ultimately given vincristine and was re-challenged with both high-dose steroids and IVIG, yielded a platelet recovery to 50 and 102 thousand/µL at two and seven days, respectively. ITP, which affects approximately 3.3 per 100,000 adults, has traditionally been managed with steroids and/or IVIG. Treatment for refractory ITP, however, is not as well-established. Various options, however, have been explored recently, one of which is the use of immunotherapy. Rituximab, for example, is reported to have an overall response rate of 60%, but with the caveat of only a 20-40% extended remission rate. Other groups have studied thrombopoietin receptor agonists (TPO-RAs), such as eltrombopag and romiplostim, which collectively maintain a sustained response in approximately 25% of patients. And perhaps the most novel approach to date, as in the presented case, is the use of Vinca alkaloids in combination with steroids and/or IVIG, with one study showing meaningful platelet recovery with such therapy in 75% of patients.

Biography

Samuel B Reynolds has completed his MD from the University of South Florida, Morsani College of Medicine. He is currently in his first year of Internal Medicine residency training at The University of Louisville School of Medicine. He has published numerous manuscripts in the field of both oncology and general medicine and plans to pursue advanced training in Hematology and Oncology following residency.

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