What are the practical considerations in management of the most common adverse events with IMiDs?

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Welcome to *Managing Myeloma*. I am Dr. Ajay Nooka. I am frequently asked, "What are the practical considerations in management of the most common adverse events with immunomodulatory agents?"

There are four classes of FDA-approved agents for multiple myeloma, the first being the immunomodulatory agents, the proteosome inhibitors, HDAC inhibitors, and monoclonal antibodies. When you look at the IMiDs, there are three IMiDs that were approved: thalidomide, lenalidomide, and pomalidomide. The common theme that you see across these three agents is the increased risk for a venous thromboembolic event. Whenever I am starting somebody on an immunomodulatory agent, my first step is to start them on a thromboprophylaxis, appropriately risk-stratifying. If the patient does not have any other comorbidities, if the patient has a low risk for formation of a clot, a simple aspirin should be able to prevent a clot.

The next one is if somebody has a prior history of DVT, or using a steroid-based regimen, or using in combination with any cytotoxic treatments, the patient is obese, hyperviscosity syndromes; these are all the things that would prompt me to use a low-molecular weight heparin in these patients.

What else do we see with the immunomodulatory agents? The second side effect is myelosuppression. So, myelosuppression can happen not only because of the IMiDs, it also can happen with the disease-related process. It is certainly of importance for us to identify whether the myelosuppression is from the disease or from the IMiD, and certainly, we can use the help of growth factors to continue to deliver this treatment in patients who have myelosuppression.

The other side effect that you see with the immunomodulatory agents is increased risk of infections. I typically do not use an antibacterial prophylaxis when I am using IMiDs (the only time when I make an exception is when I am using in combination with high-dose steroids that I would certainly need basically prophylaxis with either sulfamethoxazole/trimethoprim or phenazopyridine as a second line in patients who are sulfa allergic). So, whenever I am using this, I certainly would not start lenalidomide and sulfamethoxazole/trimethoprim at the same time. I would give a cycle of lenalidomide, make sure that the side effects are well understood before I institute sulfamethoxazole/trimethoprim, which also can cause rash. When you start both of them at the same time, it is very hard to identify which is the offending agent to stop.