Management and treatment of asthenia and cognitive impairment

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Welcome to Managing Myeloma. I am Dr. Sagar Lonial from the Winship Cancer Institute of Emory University School of Medicine and I am here today to provide a clinical commentary on the management and treatment of asthenia and cognitive impairment. This is a common complication of a number of drugs that we use in the treatment of patients with myeloma. Specifically, thalidomide, lenalidomide, and bortezomib are all associated with some level of fatigue, asthenia, and occasionally cognitive impairment. Additionally, the use of high doses of dexamethasone or other corticosteroids can also be associated with cognitive impairment or confusion, especially in elderly patients. There are a number of approaches that can be used early on in the treatment to try and minimize the effect of these major complications of treatment and they often use additional pharmacologic intervention. The drugs most commonly used include methylphenidate, also known as Ritalin, or dextroamphetamine also known as Adderall. And low doses of these drugs, particularly if they are given in the morning, can often be very helpful to try and get patients more active and awake early on in the day in order to do additional activities of daily living. Only in rare situations should a second dose be given later on in the afternoon for patients who do not appear to have significant benefit from the first dose in the morning. It is also important to consider dose reduction or dose modification of drugs if they are causing significant asthenia or cognitive impairment and, oftentimes, reducing either lenalidomide or thalidomide dosing or potentially going to weekly bortezomib dosing may offer alternative approaches to try and minimize this side effect. It is also important to tell patients that they may experience this as a major side effect and that it may actually get better with prolonged therapy. Oftentimes, we see fatigue or asthenia as a major side effect of treatment of myeloma and as the myeloma disease burden reduces, often this side effect actually starts to get better on its own even without additional further dose modification. So these strategies about
educating patients to be aware of this potential complication, trying to get them through the first two cycles of treatment to demonstrate benefit of the drug, and then using additional pharmacologic interventions are all strategies that one can use to try and minimize asthenia and cognitive impairment during treatment.

Additionally, it is also worth noting that both thalidomide and lenalidomide are given in the evenings predominantly because of their known sedative effects. In fact, thalidomide was originally used in the 1960s and 70s as a sleeping pill. And for this reason, administration of these drugs later on in the day would actually minimize some of the cognitive impairment that is often seen with sedation with both lenalidomide and thalidomide.

For additional resources, please see
*Managing Myeloma Compendium of Drug Regimens*

**FACIT-F:** Functional Assessment of Chronic Illness Therapy-Fatigue. [www.facit.org/FACITOrg](http://www.facit.org/FACITOrg) (registration is required to access scoring and interpretation materials at Facit.org. Facit.org and MediCom Worldwide, Inc. are non-affiliated)

**References**


