ManagingAML

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Is it possible to deliver liposomal daunorubicin and cytarabine on an outpatient basis?

Hello, I am Dr. Eunice Wang and I am frequently asked, “Is it possible to deliver liposomal daunorubicin and cytarabine on an outpatient basis for patients with secondary AML?” Now this question really highlights what are the adverse events that we would expect with liposomal cytarabine and daunorubicin and can these toxicities be managed in the ambulatory setting.

As you know cytarabine and daunorubicin or 7 + 3 is a standard intensive chemotherapy for patients with newly diagnosed AML. Now the liposomal formulation is not to give in a continuous formulation, but rather is given a 90-minute infusions on days one, three, and five. The convenience and the administration route of this novel formulation has made it particularly amenable to outpatient administration. For example, patients can be scheduled to receive liposomal cytarabine and daunorubicin on Monday, Wednesday, and Friday, and this can easily be accomplished in many centers in the clinic setting. However, looking back on the pivotal trial which led to approval of these agents, the toxicities of liposomal 7 + 3 are identical to those seen with standard 7 + 3. For many centers concerned about the prolonged myelosuppression and the risk of neutropenic fever and sepsis has prompted most individuals to subsequently admit patients, either at the time of initial administration of drug or as early as day six following outpatient administration, with the plan for prolonged three- or four- or five-week inpatient stay to manage those particularly significant toxicities associated with myelosuppression. We know that the liposomal cytarabine/daunorubicin has been associated because of its improved pharmacokinetic properties with delayed time to neutrophil and platelet recovery as compared to 7 + 3. For this reason, we may even anticipate a little bit longer inpatient stay for those individuals and the need for careful monitoring and administration of particularly platelet products because of the slightly higher risk of hemorrhage in the setting of that prolonged thrombocytopenia.

Thank you very much for watching this activity and I hope this information is going to help you treat your patients with secondary AML in a safer and more efficacious fashion.