What is the current thinking on waiting for genetic information before starting treatment?

Eunice S. Wang, MD
Chief, Clinical Leukemia Service
Professor, Department of Medicine
Roswell Park Comprehensive Cancer Center
Buffalo, New York

Welcome to *Managing AML*. I am Dr. Eunice Wang, and I'm frequently asked, "What is the current-day thinking on waiting for genetic information before starting treatment?"

Many of us when confronted with an acute leukemia patient, we're taught in our training period that we need to start chemotherapy ASAP, that this is an oncological emergency, under no circumstances, once we have the diagnosis, should we wait for additional information.

However, that was in the era where we did not have targetable mutations for this disease. In the current era, particularly in patients who are older and unfit, as well as for those that are younger and fit, is important to wait for genetic information for some subsets of patients. For patients who might be eligible, who are younger, who might need a FLT3 inhibitor, knowing that result is important; waiting for an older individual who might not tolerate venetoclax/azacitidine and may be eligible for an IDH inhibitor, that might be useful to wait.

How long can we wait? We can actually wait several days. Studies done in Germany looking at over 2,000 patients examined the outcomes of delaying induction chemotherapy in these individuals to allow for genetic and molecular results. There is absolutely no difference in the overall outcome of those patients by waiting that period of time.

Now, obviously, we need to clinically keep in mind, and even in that study, that patients who had rapidly growing white blood cell counts and had evidence of hyperleukocytosis with respiratory failure and other manifestations do sometimes need to have intensive therapy started sooner rather than later, but for the majority of the patients, particularly elderly patients, it may be wise to wait so that you can offer the patient the greatest options and panoply of targetable approaches if their disease expresses one of those mutations.

Thank you very much for viewing this activity.