Welcome to Cancer Newsline. Your source for news on cancer research diagnosis, treatment, and prevention. I'm your host, Dr. Oliver Bogler. Our guest is Dr. Robert Orlowski, Professor and Chair Interim of the Department of Lymphoma and Myeloma, and we'll be talking about asymptomatic or smoldering myeloma. Dr. Orlowski, what is smoldering myeloma?

Multiple myeloma is a cancer of plasma cells, which are a type of cell found in the bone marrow. And most patients who develop symptomatic multiple myeloma, which is the type of myeloma that we treat with chemotherapy, probably had a precursor to that which is called smoldering multiple myeloma. That's not always detected during the smoldering phase because patients don't have symptoms, but the advantage to being able to detect them earlier is the possibility that we may be able to apply treatment at an earlier stage which may prevent them from developing symptoms. And, unfortunately, the kinds of symptoms that patients with symptomatic myeloma can get include problems like bone pain or fractures, you can have anemia which leads to fatigue, you can have high calcium levels which can damage the kidneys, and, in general, kidney damage can be a symptom as well. So, it would be really great to have a therapy that we could use earlier which would prevent some of these potentially very serious complications from occurring.

So, you mentioned it's asymptomatic and I guess sometimes it's an incidental finding of a routine examination. How can-- how can it be found more systematically?

Well, the most common ways, as you mentioned, that people are detected as having smoldering myeloma is that they have a laboratory study for some other reason, sometimes even just a routine yearly physical and they have maybe a little bit of anemia or a little bit of kidney damage or sometimes the protein level is a little bit high in the blood and that prompts their physician to think gosh, what's going on here, let me do some more investigation. And often times smoldering or in some cases symptomatic myeloma is what's found. Right now, there are no routine screening recommendations recommended for myeloma. In part, that's because there's about 32,000 to 33,000 cases of myeloma diagnosed each year and so that's a relatively small number, but we hope moving forward to be able to develop some tests that would be more specific, hopefully cheaper, and therefore a little bit easier to do from a screening perspective.

What's the risk of having smoldering myeloma? Is it always-- does it always progress to full blown disease?

Great question. The good news is that it does not always progress and we can actually divide people up into those who are at low risk, intermediate risk, or high risk. If you have low risk smoldering myeloma, that's almost the same risk of progression as what we call MGUS or monoclonal gammopathy of undetermined significance. And the risk there of progression to myeloma that needs treatment is only...
about 1% or 2% per year. So, that's relatively low, but we still recommend following those people because of course if you're in that 1-2%, that's not a good thing for that patient. If you have intermediate- or high-risk smoldering myeloma, your risk of progression is more like 10% per year for the first five years and those are some of the people who we're targeting with some of our new agents, trying to first in the short run maybe delay progression. The benefit to delaying progression is that our therapy for myeloma-- let's say five years from now-- will be a lot better than it is now. So, there is some benefit to delay, but also in the longer term what we hope to do is by using, for example, immunotherapy sooner in the smoldering setting, we may even be able to get rid of myeloma altogether. Some of these studies have been supported by the Moon Shot effort here at MD Anderson and we now have funding for the smoldering studies from both the Leukemia/Lymphoma society and the Multiple Myeloma Research Foundation. And we actually are very excited because we have one patient who went on one of our immunotherapy trials just recently who after just three doses of an immune therapy was able to achieve a complete remission with complete disappearance of her multiple myeloma. We hope, of course, that that will be a durable complete remission. We're going to keep following her, but because we're doing a lot of studies to try to understand why some people progress and others don't, we may be able to identify exactly which patients will benefit from which therapies.

>> Those are some exciting results in your research. The agents you mentioned that are being used for the high-risk smoldering myeloma patients, are they all immunotherapy agents? Is that where the field is going?

>> Right now, we're using all immunotherapies. The rationale is that, of course, if you have symptomatic myeloma that needs chemotherapy, we tend to use nonimmune drugs. So, the hope is that the immune therapies will work and even if they do not, there will not be resistance to the chemotherapies if we have to give them later on.

>> Thank you very much, Dr. Orlowski for sharing your expertise with our listeners.

>> My pleasure. Thanks very much for the opportunity.

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