



Patient Power

What Indicates a Need for Another Bone Marrow Biopsy?

Naveen Pemmaraju, MD

Associate Professor of Medicine, Department of Leukemia
The University of Texas MD Anderson Cancer Center

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Andrew Schorr:

This question is from Cynthia and she says, "I was diagnosed with ET (essential thrombocythemia). I'm JAK2 positive," so she has that JAK gene. "When I was 66 years old," now she's 68, I'm about to be 68 as well, "What markers on my blood work, besides platelets, are important for my doctor to watch? What indicates a need for another bone marrow biopsy?"

Dr. Pemmaraju:

Well, thanks, Andrew. And thanks to the question from Cynthia out there. This is very important. This is what we talk about day-to-day, week-to-week in the clinic. There are a couple of parameters outside of the platelets. One, I would say the most important for us to watch are the other of the big two. That's your hemoglobin number, also known as anemia; if it's too low, or polycythemia, if it's too high, and then the white blood cell count is also very important. Again, if too high, or too low, it can tell us what's going on.

With ET, the key thing is it can transform, or change into any of the other MPNs. For example, PV (polycythemia vera), myelofibrosis, or—and I hate to mention it, but it does happen five, maybe seven percent of our patients, where the disease can go to acute myeloid leukemia, AML. So, distinct blood count changes, either too high, or too low, can give us clues if the MPN is changing, or in fact, going to AML.

And so, the answer for a repeat bone marrow is based on that, which is, let's look together, patient and provider to see if there are subtle or avert changes in the blood counts that are markedly different from the previous visit, rather than having a pre-prescribed, every three months, or every six months type of a deal.

Andrew Schorr:

But, Naveen, with all you're doing now with sophisticated testing, do you still have to poke us in the hip, or couldn't they just do it from our arm?

Dr. Pemmaraju:

I wish, Andrew. I think this is very important. I think with the juxtaposition, you have this sophisticated gene panel testing, JAK2, CALR, MPL, and yet we're still sticking a needle in people's backs in a very painful procedure. Nothing still has overmatched as the gold standard, the bone marrow aspiration biopsy. So, for now, we're—pun intended, I guess—stuck with this procedure. But your point is a good one. For example, with bone marrow transplant, can you believe it nowadays,

they've moved from not having to exclusively do it from bone marrow source to peripheral blood, so I think you're on the right track and we need to work on different ways of accessing this important information.

Andrew Schorr:

Okay. One thing about bone marrow biopsy, it doesn't have to be painful. It's uncomfortable, but it doesn't have to be painful if you have somebody experienced doing it.

Dr. Pemmaraju:

I wanna emphasize how right that is because at least here, at our center at MD Anderson, as you know, we have a team that is dedicated to doing it many, many people, many repetitions doing it, so there might be local discomfort, but a lot of our patients do not experience pain. I'm glad you brought that up.

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