Announcer:
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Dr. Abdellatif:
This is CME on ReachMD, and I am Dr. Abdul Abdellatif. Here with me today is Dr. Richard Johnson.

Richard, what is the emerging evidence that can change our treatment plans for managing our patients with uncontrolled gout in the renal clinic?

Dr. Johnson:
A big study in heart disease was called ALL-HEART, in which thousands of patients were treated with allopurinol versus usual care followed through several years to see if there was any effect on reducing heart attack. And these were people who had had prior heart disease, and yet there was no benefit. They were actually not targeting the right population. They weren’t even targeting people with high uric acid. They were targeting any person in heart disease, and about over 50% of the patients dropped out.

Similarly, there were 2 studies looking at lowering uric acid in patients with chronic kidney disease. The PERL trial, which was in type 1 diabetics, and the CKD-FIX trial, which was patients with stage 3 and 4 CKD. They didn’t include patients with gout.

So I don’t view any of those trials as really saying that lowering uric acid is not beneficial in patients with gout. We know it’s beneficial in patients with gout. We know it reduces the gout attack. We know it reduces inflammation. And there’s data that it can reduce cardiovascular mortality and kidney disease progression.

Abdul, what do you think are some of the more important new studies?

Dr. Abdellatif:
Thank you, Rick. We actually looked at 152 patients in the MIRROR trial that was recently published. And actually, not only did it have benefit to the patients, it led to the FDA changing the label on the medication that when you treat patients with pegloticase, it’s better if you use pegloticase with methotrexate. Why? Because when we actually did this clinical trial, we randomized patients to either be on pegloticase by itself or pegloticase with methotrexate to control the immune system to prevent the drug from being eliminated from the body very quickly. And we showed that we actually improve the response rate of these patients from 39% complete response rate to 71% complete response rate at 6 months. So we know if we use the appropriate therapy to target our patients with uncontrolled gout, we can do a better job with the new advancement in treatment of patients with uncontrolled gout.

We also studied pegloticase in patients with transplant. For patients with lower GFRs, we know that if you look at the PROTECT trial that I presented, because not only we wanted to show that it benefits patients across the board – if they have kidney disease, they don’t have kidney disease, they’re patients with transplant – and we showed in our transplant patients from about 20 patients that we studied that had had their transplant for at least 1 year, and we know gout is more prevalent in the transplant population; almost 13% of our transplant patients have gout. We actually showed those patients with uncontrolled gout, if we gave them pegloticase, we had about 89% of those patients’ response to therapy with zero infusion reaction, no cardiovascular events, and no anaphylaxis at week 21. As for the transplant patients, they’re already on immunosuppression agents, so you only have to give them the pegloticase.

Dr. Johnson:
Methotrexate can accumulate and, you know, be toxic in patients with really bad kidney function. So at what level do you use methotrexate? Is there a cutoff of the GFR, and what do you do if the GFR is below that?

**Dr. Abdellatif:**
In the MIRROR clinical trial we studied, one-third of the patients had moderate chronic kidney disease. We did not study patients with severe chronic kidney disease of GFRs less than 30, but we were cut off at 40 GFR. For those patients who were studied, we did not see any nephrotoxicity; we did not really see any hematological side effects of the drug or abnormal liver function tests or muscular complaints of those patients. So we know at the level of 15 mg that was used weekly for those patients, the patients tolerated the treatment very well and, independent of their kidney function, they all did very good with the therapy compared to pegloticase by itself.

**Dr. Johnson:**
It was a good discussion and, thanks, that's our time. Thank you for joining us.

**Announcer:**
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