

BCAN- Stephanie: You mentioned that occasionally the upper tract might also be seen in the second kidney. Is there any kind of recommendation on when you can start treatment on that second kidney? Do you do them both at the same time? And how often does that occur?

Dr. Linehan: Yeah, so to have what we would call synchronous tumors, where you have tumors in both kidneys at the same time, is very rare. That's probably maybe somewhere around two to four percent. And I think you have to take your time to figure out: does one kidney have low-grade and the other kidney has high-grade? If they both have high-grade, you may end up treating them at the same time, and even with the low-grade. But it's a very complex issue, depending on is the tumor in the ureter, or is the tumor up in the kidney? Is it low-grade or is it high-grade? Are these patients able to have what we call systemic therapy, like an immunotherapy, because there are options in that realm for upper tract epithelial carcinoma as well.

Dr. Steinberg: I know one of the questions that was sent in was talking about: are recurrences closely genetically related, are the recurrences daughter cells of the original tumor, or are they new tumors arising in the urothelium that it has a field effect? So clearly, the person asking this question has done their reading.

Dr. Matin: Yeah, so from an academic perspective, this is something that a lot of people have had an interest in. As it turns out, we can't say for sure that they are daughter cells or clones, as we say, but generally the data seems to show that most of them are. They're very similar, in terms of their different mutations. And the subsequent recurrences that occur, whether they're upstream or downstream, all seem to be related.

We actually just finished up a study looking at synchronous disease as well as metachronous, so metachronous meaning occurring at different points in time. And so we looked at those who had bladder cancer first, and then developed it in the upper tract, and then those who had it in the upper tract and then lower tract. What you tend to see is that the initial tumor and the subsequent recurrences all have the same molecular subtype. And then all the subsequent recurrences seem to basically maintain that subtype as well.

The one more intriguing finding was that patients who developed bladder cancer first had what we called a basal subtype, and the upper tract recurrences were basal usually also. On the other hand, any case where the upper tract was involved first or simultaneously, those were what we call the lumenal subtype, and then all the subsequent recurrences were lumenal also, even if they occurred in the bladder. So that, I think, is a bit of a novel observation and we are in the process of getting that paper published.

Dr. Steinberg: Thank you. I must say that there were very few questions in the Q&A, and I think that's because of the really truly outstanding lectures that everybody gave, and the slides were fantastic, the talks were fantastic. Everything was right on point, and delivered a tremendous amount of clinical information.

BCAN- Stephanie: I'd like to just thank everybody. Thank you all as our experts. It has been phenomenal.

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