Mucositis

Presented by Dr. Jared Weiss, Associate Professor of Medicine, University of North Carolina School of Medicine and Josh Bauml, Assistant Professor of Medicine, Hospital of the University of Pennsylvania

TRANSCRIPT

(JW) Hello, I'm Jared Weiss, Vice President of Cancer GRACE and a Medical Oncologist at the University of North Carolina Chapel Hill and I'm here with my colleague. (JB) I'm Josh Bauml, I am a Medical Oncologist at the University of Pennsylvania.

(JW) So, we've spoken before about our dissatisfaction with all the side effects that our curative intent chemotherapy and radiation can create. (JB) That's absolutely right. (JW) There are some things we are doing pretty standard in our practice to try to help. We're giving anti-nausea drugs quite aggressively and there has been some advances in recent years in those cocktails. The longer I do this, the more IV fluid I give. (JB) It's a lot of IV fluids that we need. (JW) I keep going up, and I have yet to reach a threshold where I think it's too much. Certainly, after the fact we use pain medicines to treat pain, nerve stabilizing agents to stabilize some of the nerve damage causing pain that we give, but it would be sure nice to prevent side effects. I think that's something we've all fantasized about. We don't have any new standards of care this years ASCO, but we do have some hints that we might have some stuff in the future that might really help.

(JW) I found mucositis to be one of the more problematic things that my patients go through. (JB) Yes, I think that our current treatments, things like using magic mouth wash, soft-bristled toothbrushes, and things like that are really like putting a band-aid on the problem. (JW) We do the best we can, but they're not great. (JB) They're not great. There have been prior studies that look at trying to prevent mucositis, but the concern that's always there is if you're doing something that prevents cell death that's not going to be good for the cancer cells.

(JB) You want the cancer cells to die so you don't really want to protect cells in this region while you're getting radiation.

(JW) So, that would actually be my criticism, my biggest criticism of the two abstracts or not criticism but why they're not ready for prime time yet. (JB) So, what were the abstracts that they had? (JW) The drug GC419. (JB) That's a license plate name. (JW) That's clear that it's ready to go prime time clinical when it has a bunch of letters and numbers. But, it was a protective agent protective from superoxide damage to healthy cells. The idea was to prevent this mucositis, the inflammation and pain and such that our patients experience. It did work. A clinically relevant statistically significant reduction in severe mucositis; reduction in the incidence and its duration. So, I think exactly what we were looking for. What we don't have yet though is the proof that it didn't hurt cancer outcomes or survival. (JB) I think that's really critical especially given its mechanism of action. I advise my patients who are getting chemoradiotherapy to avoid high-dose antioxidants during radiation. Both radiation and chemotherapy work by oxidative stress. It doesn't feel right to have an antioxidant right in that spot, but I think if the trail data shows that it's not harming outcomes then it is very reasonable to consider this. Especially if it is helping toxicity. We don't want to make our patients suffer by doing this.

(JW) The other one was a melatonin gel. That one did not reach significance, but it trended the right way. Again, no proof we're not hurting people in terms of their cancer outcomes or their survival. Promising, but that's a pretty huge caveat I think to watch out for.

(JB) I think one of the other things we're trying to do, and we are doing some work on this at Penn right now, is trying to adjust your radiation volumes, adjusting your radiation techniques to minimize exposure to normal healthy tissue. We just recently did a study amongst patients who had had surgery with good margins in a good place not radiating the primary site if everything looked OK. I think that is an exciting approach and we will see when the data comes out to see the outcomes. But, I think that is an appealing approach to consider to minimize the toxicity.

(JW) Just to finish off, there was another one looking at dermatitis. Our patients get basically an awful sunburn during radiation and it looked favorable for that outcome but again we are waiting on the proof that we're not hurting people. (JB) Yes, there was another cream that was found. This was in lung cancer who among patients were taking EGFR tyrosine-kinase inhibitors, but it's relevant. What it is is an epidermal growth factor cream and the mechanism of action has been shown to help with wound healing. So, there is every reason to think that it's not specific to the EGFR tyrosine-kinase inhibitors. It might be effective in this setting too and I think that is something to look at.

(JW) Well, hopefully we'll be able to reduce our side effects without compromising cure. (JB) That would be great.

http://cancergrace.org/lung/2018/07/09/asco-2018-head-and-neck-cancer-mucositis/