

**Ari Ciment – WHN**  
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Larry Bernstein:

All right, we welcome back Dr. Ari Ciment. Ari, my first question is it's been a week, what's new in the hospital? Do you have a bunch of new Omicron patients? And if so, what do they look like?

Ari Ciment:

A bunch of new Omicron patients. Omicron is sort of fleshing out their underlying comorbidities.

Larry Bernstein:

let's imagine you have a bad case of heart disease, you catch COVID, it aggravates the heart disease and it sends them to the hospital?

Ari Ciment:

That's what it looks like. So, you're more likely to have an MI if you have some coronary disease, just like you pointed out. If you have diabetes, you're more likely to get diabetic ketoacidosis.

Larry Bernstein:

Now, if we compare this with a generic flu, what we notice is there's significant loss of life for children under the age of one and for the elderly. The reason why the flu kills the elderly is it causes some form of pneumonia and they end up dying of the pneumonia. But they really died of old age and comorbidities associated with it. How do you compare Omicron with a standard bad flu?

Ari Ciment:

I think that's a perfect analogy. I think in 1919 when they had the flu epidemic, the majority of people probably didn't die of the flu itself, they died from bacterial super infection, and as opposed to the COVID Delta surge where we were seeing a lot of ARDS from COVID pneumonia. Here, it seems like that people are getting sick because of their Omicron disease, but it's not directly the Omicron; it's not the, the flu-like illness itself, it's what it's bringing out.

Larry Bernstein:

And just to contrast it with Delta; there was a, a lot of virus in the body, your body went into shock in the sense that it started producing a lot of fluid. That fluid would end up in the lungs, it would interfere with your normal breathing apparatus, and then low and behold we are in the hospital with a bacterial infection in the lungs. I'm hearing that Omicron does not cause that sort of body response but instead it's staying in the upper nose, respiratory area and away from the lungs.

Ari Ciment:

Right. There are at least seven studies, that are published now showing that the phenotype of this Omicron is different than the Delta; it does not attack the lungs. However, I am not sure if in reality the unvaccinated patient is going to have that same phenotype. I've seen already a few of the unvaccinated Omicron that it does seem to act a little bit like the old Delta.

Larry Bernstein:

I see. So if you compare and contrast a vaccinated patient with an unvaccinated patient, I guess what's happening with the vaccinated patient is because the antibodies and the T-cells are all reacting to take down the Omicron virus as it enters the body, it doesn't engage, the full body apparatus that would cause the pneumonia. And I think what you're saying is that for an unvaccinated patient, he or she would get a greater response that could result in pneumonia.

Ari Ciment:

Correct. But even in that unvaccinated patient, the pneumonia looks different. When they've done these hamster models and the mouse models those are the in vitro studies showing decreased lung infectivity. There is a difference in the phenotype of this disease, but those unvaccinated are going to have more of a response whether it be upper respiratory, but it's going to lead to the pneumonia. We're seeing patients all across the world that are unvaccinated are much worse off if they get even the "lighter" Omicron.

Larry Bernstein:

Now, one of the concerns, for vaccine hesitancy was that the vaccine was worse than, than the disease. The disease varied by age, by comorbidity, but you've been in the hospital for the last year and a half visiting these patients. How bad is the disease for the unvaccinated?

Ari Ciment:

For the unvaccinated, there are people that will get by just like in the Delta phase before, but the vast majority of the people that things go wrong for are the unvaccinated. It's clearer than ever actually if you've been double vaccinated, even though your hospitalization rate, vaccine effectiveness is 50%, it's 50% even if double vaccinated. If you're triple vaccinated, it's 88% reduced risk of being hospitalized, so it's much better if you're triple boosted. But even if you're hospitalized being double vaccinated, chances are you're going to be okay.

Larry Bernstein:

Mm-hmm (affirmative). We have a lot of viewers probably who have had two vaccinations, have not gotten boosted. Based on that 50% versus 88%, would you highly encourage people to get their booster right now?

Ari Ciment:

Yes, I would. You are going to hear cases, "Oh, I just got my booster then I got Omicron," because it takes some time for the booster to kick in. But the numbers are already published out there that you are significantly less likely to be hospitalized if you have Omicron, if you have triple boosted versus just two vaccines.

Larry Bernstein:

I have some listeners who have vaccine hesitancy who have not been vaccinated. One reason I've, I've heard for hesitancy is, "Look, if I've been working in a retail store for 18 months and I haven't got it, I must have some natural immunity." Do you think that applies to Omicron as well? Do you believe in natural immunity story or that they may have gotten it and had been asymptomatic?

Ari Ciment:

I think that there is definitely a validity to those who have vaccine hesitancy if they already had COVID before. I do feel like the natural immunity, if you've had previous infection, is understandable. I mean, studies have shown that if you've had COVID it's like you've had two vaccines. So, in other words, you've had it. If you haven't had your booster, you're better off having three vaccines than having just one prior COVID infection. But if you have one prior COVID infection, it is you, like two vaccines; you have T-cell immunity as well, there is some, some evidence to support that. However, in the vast majority of people that say that they've felt like they had COVID, they probably didn't have it, and those patients should be vaccinated.

Larry Bernstein:

If you've had COVID it's like having two shots, which you called, like, a 50% reduction in hospitalization. And you've had COVID and now you get this one shot, it's something you'll probably get to the 88% number of not being hospitalized. That's a material difference.

Ari Ciment:

Yeah.

Larry Bernstein:

When I was hospitalized at Mount Sinai, I had a chance to speak to a substantial number of the nurses, and a lot of them expressed hesitancy of getting the vaccine. They mentioned that they were worried about getting pregnant, sometimes they said they wanted to wait a year and see how the vaccine worked out in the general population. What would you tell your nursing staff at this point about whether or not to get the vaccine if they were thinking about having a baby, or wanted to see more data before making a decision?

Ari Ciment:

Every hospital there is hesitancy in the age group of peri-pregnancy. The issue is that if somebody's pregnant and then they get COVID, there is clear data that there's more of a risk to not only the baby but the mother as well once they have COVID, so you want to get the vaccine even if you're pregnant. And that's something that you have to talk about with your OBGYN, but we would recommend a vaccine to prevent you from getting COVID, which is much more deleterious to the fetus and the mother than the vaccine. If we just think of it logically, you're getting multiple antigens when you got COVID versus one antigen, spike protein, whichever vaccine you've got, so it stands to reason you should take the vaccine more than you should get COVID.

Larry Bernstein:

This Omicron is incredibly contagious. I've heard numbers five, seven, 10 times more contagious than Delta. One of the concerns, the vaccinated had with the unvaccinated population was that the unvaccinated would be spreaders, and they only wanted to stay with their vaccinated friends. But I'm hearing that the vaccinated are also contagious with this Omicron. How do you distinguish being a super spreader to the extent that you're vaccinated versus not?

Ari Ciment:

if you're double vaccinated, I agree with Dr. Eric Topol who has voiced his opinion on this matter, being fully vaccinated now shouldn't be two vaccines, it should be three vaccines.

Larry Bernstein:

Okay.

Ari Ciment:

That's the reality. if you've had two vaccines and you're around somebody that had COVID, you could potentially spread it. Now, the caveat to that is that it's not as deadly or it's not as dangerous, it's just like having a cold for most people so you don't have to live a life of seclusion now. It's not like the first wave, so you have to balance those two.

Larry Bernstein:

Earlier this week the Chicago public school teachers went on strike. They closed the Chicago public schools because teachers said they didn't feel safe with Omicron on the rise. Is that a rational decision for schools to close indefinitely because of Omicron?

Ari Ciment:

I understand this is a very touchy subject, but I think it is not a rational decision, personally. I think it's more important to keep kids in school and to educate them. And there are risks but we can't overdramatize the risks of this variant compared to the prior variants.

Larry Bernstein:

It seems that for kids that are between the age of zero and 20, Delta was not that dangerous nor was the original virus. Is Omicron proving to be even less problematic for that age group than others?

Ari Ciment:

As you have so many more Omicron infected people, you're going to see numbers in the children's hospital, and numbers in the children's ICU go up. I am not a pediatric doctor, but I could imagine that those numbers are going to go up, but it's not because the variant is more deadly, it's just because the numbers (of total infected children) are really sky rocketing. that's what we see in the adults too, so I imagine that flows over to the pediatric population.

Larry Bernstein:

If you had a teenage child who already had two shots, would you recommend they have a booster or do you think that the vaccines for a child isn't worth the gander?

Ari Ciment:

That, that's a great question because I have two kids between... just at the age. Just to prove, actually, the CDC just advised that it's approved above 12 years old, and I would take the vaccine. Again, right now the reason for the vaccine is a little bit more to prevent them from losing time, five days out, as opposed to the risk of infection, it's tricky. I'm not pushing for it, I'm not rushing to the, to the pharmacy right now to get the vaccine. My answer is I'm not scared of it but I'm not rushing to get it.

Larry Bernstein:

For the 80-year-old grandma you would say, "Do whatever you need to do. Go get that booster." For the 60-year-old businessman, you'd say, "You know what? I think it makes good sense to get a booster." 40-year-old, much less, 20-year-old, you know what? not that big a deal. Is that, is that where you are?

Ari Ciment:

Yes, that's, that's where I am. I remember when the H1N1 Swine Flu was around, they were wondering why specific populations were protected. And one of the reasons was because they had it when they were children so they had natural immunity-

Larry Bernstein:

Mm-hmm (affirmative).

Ari Ciment:

... because this Swine Flu was around as a young person. In a way I was sort of hoping that my children would get it. One of them had; one out of three already had it. But I was hoping the other two sort of had it already so we have that natural immunity also down. I don't know how well the spike protein is going to look like many years from now when there is antigenic drift,

Larry Bernstein:

Mm-hmm (affirmative).

Ari Ciment:

But I have a feeling that the natural immunity's going to play a stronger role many years from now.

Larry Bernstein:

So, you're saying that 25 years from now the fact that I had Alpha will be a positive for me. Ari, you didn't get it but you got those three vaccines. It's probably not as good as the real deal.

Ari Ciment:

Correct. Until they make a universal COVID vaccine, which will solve the problem.

Larry Bernstein:

All right, let's move onto the new antiviral drugs which will be hitting the market the next few days. This is the Merck and the Pfizer drug. I'm going to skip the scientific name because, you know, no one can pronounce it anyway. They're not real words. Ari, tell us a little bit about the Pfizer drug.

Ari Ciment:

The Pfizer drug is the more studied drug in terms of the randomized controlled trial, and it showed more efficacy. So, for instance, just to throw out a number, you are 0.8% likely to be hospitalized if you got the Pfizer drug versus 6.3% if you got the placebo drug. So that's a very good number of hospitalizations, so it's efficacious. The downside to using the Pfizer drug is it's actually two drugs in one, and one of them is a well-known HIV drug called Ritonavir, which actually is what keeps the other active drug higher up in your bloodstream which makes it work, but that causes some drug interactions. So, the issues going to be some drugs that you're on such as statins or if you're on amiodarone, those medicines either have to stop or be cognizant that you're taking.

Larry Bernstein:

Let's say that you're on a statin and you're 80 and you get COVID, Omicron. Would you recommend discontinuing for a week your statin, taking down a Pfizer drug because it's more efficacious than the Merck drug and maybe co-terminously trying to get a monoclonal antibody on the side?

Ari Ciment:

For the, for the 80-year-old, for the higher risk person, I'd want my numbers to be better, so if the Pfizer drug is better than the Merck drug but, like I mentioned, there are more drug interactions and probably more side effects, so I would definitely stop those drugs that I know, like statins and amiodarone. There's a special enzyme that it inhibits that the drug Pfizer, so it's very easy to look up those drugs.

Larry Bernstein:

Tell us a little bit about the Merck drug and who would be a good candidate for that antiviral.

Ari Ciment:

I think the Merck drug molnupiravir, numbers for that are less impressive. So 6.8% versus let's say 9.7%. It definitely is significant in the big scheme of things but it's not earth shattering so I wouldn't use it for my highest risk patient that I'm really worried about, I would give it to somebody, in their 30s to 60s who wants the symptoms to go away faster and wants to take something, is not happy with just letting the natural course. I think what's a better question, Larry, is whether or not you should take anything at all-

Larry Bernstein:

Yeah, should you take anything, Ari?

Ari Ciment:

I would say for a high-risk patient who can't get monoclonal antibody, I would take something for sure. But for the lower risk patient, you could really just wait it out, supportive care.

Larry Bernstein:

Let's just go through it: my teenage kid gets it; forget about it. Drink some Gatorade, do your homework.

Ari Ciment:

For sure.

Larry Bernstein:

The 40-year-old, no preexisting conditions, equivalent to the teenager

Ari Ciment:

Yeah, but there's always a 40-year-old that knows another 40-year-old who ended up on a ventilator and they-

Larry Bernstein:

For sure.

Ari Ciment:

... might be worried, so that's the patient I'd give molnupiravir, that's the Merck drug, or maybe the Pfizer drug.

Larry Bernstein:

Got it. But you wouldn't be trying to jump the line for the monoclonal. And then the 60-year-old and the 80 year old, it sounds to me like for the 80 year old you'd say get the monoclonal antibodies and if you can take the Pfizer, but if you've got something, take the Merck. Is that right?

Ari Ciment:

Yeah, the only difference between the last time we talked, which was, like, a week ago, versus today is that a week ago I think the Delta numbers were probably higher-

Larry Bernstein:

Yeah.

Ari Ciment:

... percentage wise, and now I think they're lower so there's more and more Omicron, so the Regeneron or the Eli Lilly drug is really focused against the, the Delta, so I think you're going to see less effect on the, on the 80 plus year old-

Larry Bernstein:

Could you explain why Omicron is pushing out Delta so much?

Ari Ciment:

Yeah. So, the Omicron is affecting those people that the Delta would've hit, but Delta didn't have a chance to hit 'em yet so the Omicron... So, he's actually protected from Delta because he got Omicron.

It's not like you get Delta and the Omicron. However, it's interesting that you are seeing Omicron with other viruses. I know they talked about influenza and Omicron. They're calling it a flu-rona, , which is the flu and Corona-

Larry Bernstein:

I looked at the testing centers, there's lines around the block, it's not that bad, you don't feel that sick. We're hearing that it's just the entire population is getting this Omicron. How is this going to play itself out on a local and national level? What percentage of our population do you think has been exposed to Omicron already, and when are we going to start seeing herd immunity from it?

Ari Ciment:

I think the numbers of our vaccination in the world, the USA, it's something ranked 66th in the world which is pretty sad, so I think that we're going to be hit harder than those 65 other countries. We're going to see hospitalizations sky rocket, and then like in South Africa, they're going to plummet. And there's also talk about the Omicron, the masks are not as effective so it, it's just continuing to spread. Everybody here knows another person who got infected. it's going to peak and come down. I don't think there's much we could do at this point other than, get your booster shot.

Larry Bernstein:

Do you think your first vaccine would be helpful if you, if you've been on the sidelines 'til now?

Ari Ciment:

I think if you take your first vaccine and then you walk around, with a N95 mask or you stay really in hibernation, then you have a good chance. But if you're out and about like you were before, then chances are you're going to get this thing.

Larry Bernstein:

And will the vaccine prevent you from getting to the hospital? Even one?

Ari Ciment:

one vaccine is unlikely, but it's better than zero.

Larry Bernstein:

And when you compare and contrast, let's say you're unvaccinated and you run and grab the monoclonal antibodies, which is a riskier proposition health-wise, the monoclonal antibodies or the vaccine?

Ari Ciment:

Okay, and now you just brought up a great point. I don't know if you meant to do it.

There is actually an alternative for somebody who has not been vaccinated. Let's say there's a reason. Let's say there was a patient who was anaphylactic to vaccines so they didn't take vaccines and now they're very worried. There is a monoclonal antibody that's specifically made for preexposure prophylaxis. It's called E-V-U-S-H-I-E-L-D, Evushield. And that is something they could look into. It's called Evushield, and that's actually interesting for the person who really wants to get the vaccine, is really worried and hasn't been vaccinated to investigate about that option.

Larry Bernstein:

And another example is I've heard there are people who have certain autoimmune disease who have not vaccinated for fear of some sort of complicity associated with that comorbidity, what are your thoughts on that at this point?

Ari Ciment:

it's definitely a reasonable avenue to speak with your rheumatologist or oncologist, say, "Hey, look, I, I didn't have the vaccine. Can I even get this monoclonal antibody to protect me at least for the next 30 days or so," however long it lasts in your bloodstream.

Larry Bernstein:

I end each session, Ari, on a note of optimism. What are you optimistic about?

Ari Ciment:



I'm optimistic that I'm not seeing the same ARDS that we saw on the whole with the other variants. I'm optimistic that this will turn out to be a bad cold for most people. And I'm optimistic that this will actually give us all the herd immunity that we've been looking for-

Larry Bernstein:

Mm-hmm (affirmative).

Ari Ciment:

... so that we could move on from this, from this and be normal in three to four months.

Larry Bernstein:

Perfect. Thank you, Ari.

Ari Ciment:

Thank you very much.