VCHIP VDH COVID-19 Q&A Chat April 13, 2022

Diabetes and COVID

C: Benjamin Lee, MD, UVM Children's Hospital & Larner COM Dept. of Pediatrics: https://www.cdc.gov/mmwr/volumes/71/wr/mm7102e2.htm#:~:text=SARS%2DCoV%2D2,induce%20newly%20diagnosed%20diabetes

C: Benjamin Lee, MD, UVM Children's Hospital & Larner COM Dept. of Pediatrics: Regarding diabetes and COVID: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2788283

C: 1 sibling dx'd with Type 1 DM prior to contracting COVID.

C: DMI and viruses is actually really interesting, there is also evidence that kids that have gotten the rotavirus vax are less likely to develop DMI. And I know when I was in residency, we would see new DMI dx in clusters thought to be related to the viruses circulating in the community.

C: Benjamin Lee, MD, UVM Children's Hospital & Larner COM Dept. of Pediatrics: (verbally): There have been a number of reports in the last few months that have suggested two things. 1st that the incidence rate for type 1 and type 2 diabetes during the COVID years (2020-2021 time frame) for new diagnoses seem to be increase significantly compared to immediate pre-COVID years. There are smaller reports suggesting that there might be an increased risk for development of diabetes following COVID-19. Those are two slightly different things but related. I can't say anything about familial type 1 diabetes and scenarios like that but there is a suggestion going forward with type 2 diabetes in adults there is a compelling hypothesis that the amount of inflammatory response that maybe COVID is driving could potentially be associated with an increased risk of insulin resistance. I will say for the type 1 diabetes issue, there was a lot of hoopla around this relating to rotavirus. After some initial early signals, that potentially there could be a link between rotavirus vaccinations or getting rotavirus diarrhea. A lot of that looks like to have come out of the wash and doesn't look real after all. I would caution being too excited about early observation. I think we need a longer body of literature and data.

COVID Reinfection and Persistently Positive Tests

C: We had an unvaccinated student test positive on Jan 1 and reinfect on Jan 30

Q: Ben-Can you talk more about the likelihood of a persistently positive PCR in an otherwise well child who had a mild Covid infection? It was my understanding from the research that this was typically occurring in individuals with severe cases requiring hospitalization or those with immunocompromise. However, because everyone is afraid this is the case with all kids, we are left in a bind with determining testing for kids under age 2.

A: Benjamin Lee, MD, UVM Children's Hospital & Larner COM Dept. of Pediatrics: (verbally) This has always been a challenge. There's much more broader recognition and understanding that this could be happening more

frequently during the period when we were going from Delta to Omicron transition. Omicron was so much better at evading prior immune defenses that there was already a rationale for begin worried that it might start to happen more. I would expect that most of those cases were in the March time period. That would be where someone could've gotten Delta at the end of last year or the first half of January and then still with the 90 day time frame when Omicron was most prevalent. Since January, Omicron has been the most prevalent. So anyone who got COVID 90 days ago probably was still Omicron. I think the frequency of that will start diminishing down to what we were probably seeing pre-Omicron. Although we'll have to watch carefully.

C: Because what is happening now in the office is people are deferring any Covid testing for kids < age 2 with cold/fever symptoms if they have had Covid in the past 90 days and I think reinfection is a risk...

A: Benjamin Lee, MD, UVM Children's Hospital & Larner COM Dept. of Pediatrics: So challenging. A negative result is always helpful in those scenarios... If positive, in my mind if truly having significant symptoms, that child shouldn't be back in day care anyway... So depending on the scenario, I still think there is a rationale to test, on a case-by-case basis... however, it is also helpful to keep in mind that we likely will not be able to continue doing test-negative return to daycare indefinitely...

C: The problem is - symptoms in toddlers are rarely "significant" - so many kids have rhinnorhea and cough at baseline - and those are the same exact symptoms the kids with COVID are primarily presenting with….

C: We just had a mother in the newborn nursery who had covid and received monoclonal antibodies in December as she was pregnant. She had cough on admission and was covid positive again in April.

C: Becca (Rebecca) Bell, MD, UVM Medical Center: Last week's MMWR covers reinfection (delta and then omicron). VDH contributed to this, you might recognize some author names, https://www.cdc.gov/mmwr/volumes/71/wr/mm7114a2.htm

Clearance of PCR positivity after COVID

C: To test for flu, we only have NP flu/COVID/RSV swabs. So in cases where testing is appropriate, we are testing kids who have recently had COVID fairly often with repeat PCR. Nearly all are negative, even those with recent infections. So anecdotally, many are clearing quickly

C: Benjamin Lee, MD, UVM Children's Hospital & Larner COM Dept. of Pediatrics: Great info.