Exposure risk to babies being fed by vaccinated mothers

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There can be no assurances of safety, with so many unknowns

It is being claimed that:

1. Human breast milk does not contain SARS-CoV-2 vaccine-mRNA; and
2. That if there were any vaccine-mRNA in breast milk, it would not survive the nursing infant's digestive tract.

Risks to infants from their mother's vaccination could also come from spike protein produced by the mother's reaction to vaccination crossing into breast milk or from her antibodies passing across. The latter may well explain this report in the USA vaccine adverse events data (https://medalerts.org/vaersdb/findfield.php?IDNUMBER=1166062) of the death of a 5 month infant from thrombocytopenia. No studies on risks from spike protein or antibodies in breast milk post vaccination have been reported.

Current claims regarding the safety of the vaccine-mRNA itself are not supported by robust evidence. In a recent preprint (https://www.medrxiv.org/content/10.1101/2021.04.27.21256151v1.full.pdf), Low ***et al.*** did in fact detect SARS-CoV-2 vaccine mRNA in human breast milk. This was a small study of 10 lactating healthcare workers who were nursing their infants. Four breast milk samples were collected from each participant, one sample before being given

their first dose of the Pfizer/BioNtech experimental vaccine, and three further samples at various intervals after the first and second doses, a total of 40 samples. We do not know if the samples represent the foremilk or hindmilk, which may impact results.

Looking at the study data, 4 of the 40 samples came from 3 participants out of the 10, meaning that 30% of the mothers tested positive to having vaccine-mRNA in their breast milk. Put another way, 3 out of 10 babies are being exposed to experimental vaccine-mRNA. This number may likely be greater, given nursing infants often nurse more than five times a day, and the only 4 samples of breast milk collected per participant, were taken over several weeks.

A better study would have taken at minimum two samples every day, with one sample being foremilk and one being hindmilk, for at least 28 days post first and again post second dose of the experimental vaccination.

While the absolute quantities of vaccine-mRNA detected in human breast milk was very low (the highest concentration being 2ng/ml), this is still a relatively large amount for young babies.

It is then claimed that any vaccine-mRNA present in human breast milk that is then consumed by the infant is expected to be readily destroyed/digested. However, this is an unproven claim. The vaccine-mRNA is transported in lipid nanoparticles designed to mimic human extracellular vesicles (EVs). There is extensive research demonstrating that EVs in milk survive the human digestive tract. They are in fact readily taken up into the vascular system and more specifically bioaccumulate in the brain. mRNA has been detected in human breast milk, and shown to survive passage through the stomach, maintaining biologically active capabilities.

This challenges the claim that the vaccine-mRNA is rapidly degraded.

If not digested, such vaccine-mRNA could well be recognised by the innate immune system, initiating inflammatory signalling cascades. This would not be good for a nursing baby. We have no idea if it will contribute to gut issues. It is clear there is still so much unknown, which means there can be no assurances of safety.

It is likely that the vaccine-mRNA will be found in EVs, however, we do not know if fragmented and/or EV-free parts could make it into breast milk. Obviously, because there are so many unknowns, this is exactly why fully completed wide ranging studies are required before subjecting humans to risk from unknown harms.

A common mistake many people are making is to equate natural mRNA properties with the injected SARS-CoV-2 vaccine-mRNA. The vaccine-mRNA has been modified to a form never before seen in nature, and manipulated to ensure stability and delay enzymatic digestion. These modifications also increase the translation of the mRNA, resulting in the protein product being synthesized, i.e. the Spike Protein actually being manufactured by the body. This is very concerning with regards to infant nursing exposure, given the evidence that breast milk EVs (containing RNA) not only survive the stomach, but also potentially make it to the brain via the vagus nerve. EVs can also be absorbed in the intestines (https://www.nature.com/articles/s41598-018-29780-1) into the vasculature (bloodstream), where they remain biologically active.

The vaccine-mRNA has also been enriched with two of the main DNA base building blocks (GC), a modification that further increases transcription production of the biologically active Spike Protein. Viruses tend to have lower GC content, making them sensitive to an increase in body temperature, (which is one reason why we get a temperature when fighting infection — it is bad for viruses!). The modification of increasing the GC content in the vaccine-mRNA increases its heat stability, rendering our natural infection fighting process, such as running a fever to facilitate breaking down of viral mRNA, ineffective.

As a result, if vaccine-mRNA gets into breast milk, it is likely to survive the infant's digestive tract, and — as discussed above — it could bioaccumulate in the brain. Breast milk EVs have been measured/detected in the blood plasma postprandial (after feeding), and those that do not get absorbed have been shown to affect gene transcription in the intestinal tract.

Conclusions

We are supposed to always err on the side of caution: 'First, Do No Harm'. **Experimental interventions should not be made that do not have robust evidence of safety as well as efficacy**. This is exactly why 'whole of life' animal studies, including pregnancy and lactation animal studies must be completed BEFORE implementing human trials of any sorts, as per point 3 of the Nuremberg Code (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2352998/). This has not been done: the human trials have not even reached a full year yet, did not include pregnant or lactating women, nor nursing infants. As a result, no safety can be ascertained, and therefore should not be claimed.

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