

NOTICE: This document contains correspondence generated during peer review and subsequent revisions but before transmittal to production for composition and copyediting:

- Comments from the reviewers and editors (email to author requesting revisions)
- Response from the author (cover letter submitted with revised manuscript)*

Personal or nonessential information may be redacted at the editor's discretion.

Questions about these materials may be directed to the *Obstetrics & Gynecology* editorial office: obgyn@greenjournal.org.

^{*}The corresponding author has opted to make this information publicly available.

Date: Jul 02, 2020

To: "Loren P. Molina"

From: "The Green Journal" em@greenjournal.org

Subject: Your Submission ONG-20-1798

RE: Manuscript Number ONG-20-1798

Prolonged Detection of Severe Acute Respiratory Syndrome Coronavirus 2 RNA in a Seroconverted Obstetric Patient

Dear Dr. Molina:

Your manuscript has been reviewed by the Editorial Board and by special expert referees. The Editors are interested in potentially publishing your revised manuscript in a timely manner. In order to have this considered quickly, we need to have your revision documents submitted to us as soon as you are able. I am tentatively setting your due date to July 6, 2020, but please let me know if you need additional time.

The standard revision letter text follows.

If you wish to consider revising your manuscript, you will first need to study carefully the enclosed reports submitted by the referees and editors. Each point raised requires a response, by either revising your manuscript or making a clear and convincing argument as to why no revision is needed. To facilitate our review, we prefer that the cover letter include the comments made by the reviewers and the editor followed by your response. The revised manuscript should indicate the position of all changes made. We suggest that you use the "track changes" feature in your word processing software to do so (rather than strikethrough or underline formatting).

REVIEWER COMMENTS:

Reviewer #1: Excellent and timely case report

- 1) Some sense of the reliability including sensitivity/specificity of the PCR test should be included;
- 2) Likewise, the anti-body testing
- 3) Since we don't know what positive antibodies mean, the call for reflexive testing seems premature;
- 4) To include 1 and 2, please shorten Discussion;
- 5) You make at least one primacy claim-this and all of them need to be supported by a detailed literature search;
- 6) Some quantitative sense of how long PCR has been positive in patients with co-morbidities should be included;
- 7) A figure (timeline of testing) might be good
- 8) Please try not to use the word "population" so much

Reviewer #2: The authors have submitted a case of a seroconverted OB patient with diagnostic challenges of COVID-19.

Abstract

1 - Seems unnecessary to put decimal points for gestational age & not even clear whether 28.2 means and 1 day (.14) or 2 days (.28) - just causes distraction

Case

- 2 Line 87 presumably she was sent home to quarantine (?)
- 3 Line 95 when the positive result came back (in how long), what was the thinking and what precautions were taken?
- 4 Line 107 why is the patient undergoing weekly COVID testing?

4 7/7/2020, 9:41 AM

Discussion

- 5 Line 115 Unclear what is meant by 'has documented a temporal course' (same comment line 159)
- 6 Line 133 is the reader to understand that these patients are potentially infectious? what is to be done? quarantine for 90 days and beyond or is she not contagious?

EDITOR'S COMMENTS

We no longer require that authors adhere to the Green Journal format with the first submission of their papers. However, any revisions must do so. I strongly encourage you to read the instructions for authors (the general bits as well as those specific to the feature-type you are submitting). The instructions provide guidance regarding formatting, word and reference limits, authorship issues and other relevant topics. Adherence to these requirements with your revision will avoid delays during the revision process by avoiding re-revisions on your part in order to comply with formatting.

Numbers below refer to line numbers.

- 37. Please state that this was a nasopharyngeal swab for PCR just to make it very clear.
- 38. What EGA was she when she presented for delivery? Why did you do antibody testing at 36 weeks? You could make this clearer by saying "At 36 weeks x days, antibody seroconversion was noted. At 38 weeks x days when she presented for delivery, SARS-CoV-2 PCR testing on nasopharyngeal swab was positive, 10 weeks after acute infection". Its not clear either why you repeat tested her either for antibody or for PCR at delivery. Were these done for research purposes?
- 39. By saying "continues to remain detectable" this reader is left with thinking a follow up paper will result and that this is an unfinished story. Again, also not sure why you are continuing to test her. Is there a clinical indication? Perhaps this should read "SARS-CoV-2 testing remained positive 21 days post partum, 91 days from her initial test."
- 42. Might this be better as "Prolonged shedding of SARS-CoV-2 may occur in the pregnant patient. If prevalent, this complicates the interpretation of a positive SARS-CoV-2 PCR test in the asymptomatic pregnant patient"
- 56. Not sure how this teaching point is illustrated in your paper.
- 78/79. These are known as primacy claims: yours is the first, biggest, best study of its kind. In order to make such a claim, please provide the data bases you have searched (PubMED, Google Scholar, EMBASE for example) and the search terms used. IF not done, please edit it out of the paper. One might reasonably ask if its important that it's the first.

Please explain in your case report the reason for all of the different testing you've done for SARS Co-V 2.

- 96. Virginia Apgar was an anesthesiologist who developed a scoring system to assess need for neonatal resuscitation. Please edit the spelling of this scoring system in your paper, as it is not an acronym and should be spelled "Apgar".
- 129. Might it be important to offer that one explanation for her prolonged shedding is something idiosyncratic to this individual person whose immune system may result in delayed clearance and that it is not at all related to her pregnancy? Your paper makes an appropriately strong suggestion that its possible that pregnancy state itself is the cause and begs for a systematic study, but at this point its hypothesis generating.
- 159. Again, I'm not sure how your paper suggests a temporal relation. Can you explain further?

Did you alter any management of the patient intrapartum or post partum because of the known prolonged positive PCR or did you manage her and the baby as you would if you had been unaware of the earlier positive testing? How would a positive antibody test in the presence of a positive PCR result change your management, or did it?

EDITORIAL OFFICE COMMENTS:

1. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:

2 of 4 7/7/2020, 9:41 AM

- A. OPT-IN: Yes, please publish my point-by-point response letter.
- B. OPT-OUT: No, please do not publish my point-by-point response letter.
- 2. Obstetrics & Gynecology uses an "electronic Copyright Transfer Agreement" (eCTA). When you are ready to revise your manuscript, you will be prompted in Editorial Manager (EM) to click on "Revise Submission." Doing so will launch the resubmission process, and you will be walked through the various questions that comprise the eCTA. Each of your coauthors will receive an email from the system requesting that they review and electronically sign the eCTA.

Please check with your coauthors to confirm that the disclosures listed in their eCTA forms are correctly disclosed on the manuscript's title page.

Siu-Kei Chow will need to complete our electronic Copyright Transfer Agreement, which was sent to them by email through Editorial Manager.

- 3. You state, "This case demonstrates a favorable maternal and neonatal outcome in the setting of the longest reported presence of viral RNA by nasopharyngeal sampling after acute infection and post seroconversion in the current literature." It would help readers if you provide details of a literature search to support this statement. Include the database(s) searched, dates searched (including years) and search terms.
- 4. Standard obstetric and gynecology data definitions have been developed through the reVITALize initiative, which was convened by the American College of Obstetricians and Gynecologists and the members of the Women's Health Registry Alliance. Obstetrics & Gynecology has adopted the use of the reVITALize definitions. Please access the obstetric data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-obstetrics-data-definitions and the gynecology data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-gynecology-data-definitions. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.
- 5. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Case Reports should not exceed 8 typed, double-spaced pages (2,000 words); . Stated page limits include all numbered pages in a manuscript (i.e., title page, précis, abstract, text, references, tables, boxes, figure legends, and print appendixes) but exclude references.
- 6. Specific rules govern the use of acknowledgments in the journal. Please note the following guidelines:
- * All financial support of the study must be acknowledged.
- * Any and all manuscript preparation assistance, including but not limited to topic development, data collection, analysis, writing, or editorial assistance, must be disclosed in the acknowledgments. Such acknowledgments must identify the entities that provided and paid for this assistance, whether directly or indirectly.
- * All persons who contributed to the work reported in the manuscript, but not sufficiently to be authors, must be acknowledged. Written permission must be obtained from all individuals named in the acknowledgments, as readers may infer their endorsement of the data and conclusions. Please note that your response in the journal's electronic author form verifies that permission has been obtained from all named persons.
- * If all or part of the paper was presented at the Annual Clinical and Scientific Meeting of the American College of Obstetricians and Gynecologists or at any other organizational meeting, that presentation should be noted (include the exact dates and location of the meeting).
- 7. Provide a short title of no more than 45 characters (40 characters for case reports), including spaces, for use as a running foot.
- 8. The most common deficiency in revised manuscripts involves the abstract. Be sure there are no inconsistencies between the Abstract and the manuscript, and that the Abstract has a clear conclusion statement based on the results found in the paper. Make sure that the abstract does not contain information that does not appear in the body text. If you submit a revision, please check the abstract carefully.

In addition, the abstract length should follow journal guidelines. The word limit for Case Reports is 125 words. Please provide a word count.

- 9. Only standard abbreviations and acronyms are allowed. A selected list is available online at http://edmgr.ovid.com/ong/accounts/abbreviations.pdf. Abbreviations and acronyms cannot be used in the title or précis. Abbreviations and acronyms must be spelled out the first time they are used in the abstract and again in the body of the manuscript.
- 10. The journal does not use the virgule symbol (/) in sentences with words. Please rephrase your text to avoid using "and/or," or similar constructions throughout the text. You may retain this symbol if you are using it to express data or a measurement.
- 11. In your submission, please standardize the presentation of your data throughout the manuscript submission. For P values, do not exceed three decimal places (for example, "P = .001"). For percentages, do not exceed one decimal place (for example, 11.1%").

4 7/7/2020, 9:41 AM

- 12. Line 79: Your manuscript contains a priority claim. We discourage claims of first reports since they are often difficult to prove. How do you know this is the first report? If this is based on a systematic search of the literature, that search should be described in the text (search engine, search terms, date range of search, and languages encompassed by the search). If it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.
- 13. Authors whose manuscripts have been accepted for publication have the option to pay an article processing charge and publish open access. With this choice, articles are made freely available online immediately upon publication. An information sheet is available at http://links.lww.com/LWW-ES/A48. The cost for publishing an article as open access can be found at http://edmgr.ovid.com/acd/accounts/ifauth.htm.

Please note that if your article is accepted, you will receive an email from the editorial office asking you to choose a publication route (traditional or open access). Please keep an eye out for that future email and be sure to respond to it promptly.

If you choose to revise your manuscript, please submit your revision through Editorial Manager at http://ong.editorialmanager.com. Your manuscript should be uploaded in a word processing format such as Microsoft Word. Your revision's cover letter should include the following:

- $\ ^*\ A\ confirmation\ that\ you\ have\ read\ the\ Instructions\ for\ Authors\ (http://edmgr.ovid.com/ong/accounts/authors.pdf), and$
 - * A point-by-point response to each of the received comments in this letter.

If you submit a revision, we will assume that it has been developed in consultation with your co-authors and that each author has given approval to the final form of the revision.

Sincerely,

Nancy C. Chescheir, MD Editor-in-Chief

2019 IMPACT FACTOR: 5.524

2019 IMPACT FACTOR RANKING: 6th out of 82 ob/gyn journals

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: https://www.editorialmanager.com/ong/login.asp?a=r). Please contact the publication office if you have any questions.

4 7/7/2020, 9:41 AM

July 5, 2020

Re: Resubmission of manuscript "Prolonged Detection of Severe Acute Respiratory Syndrome

Coronavirus 2 RNA in a Seroconverted Obstetric Patient", #ONG-20-1798

Nancy C. Chescheir, MD

Editor-in-Chief, Obstetrics & Gynecology

409 12th Street SW

Washington, DC 20024

Dear Dr. Chescheir and Reviewers:

Thank you for consideration of our manuscript for publication. We appreciate the conscientious

and constructive suggestions made by all reviewers and are grateful for the opportunity to revise

this work. We believe the manuscript is substantially improved as a result of your valuable

feedback.

Included with this letter are the editor and reviewers' comments with our responses. Changes to

the manuscript are marked using tracked changes, as directed. The line references to the edits

reflect the line numbers in the tracked version of the manuscript. The revision has been

developed in consultation with all coauthors, and each author has given approval to the final

form of this revision.

The authors have read the Instructions for Authors and have adhered to the manuscript length

requirement of less than 2000 words and ~8 pages as outlined in the journal guidelines. The

authors opt-in to publish our point-by-point response letter if the manuscript is accepted for

publication.

Thank you for your consideration.

Respectfully,

Loren P. Molina, M.D., FACOG

REVIEWER #1

1) Some sense of the reliability including sensitivity/specificity of the PCR test should be included;

<u>Authors' response</u>: Thank you for this suggestion. There is currently no gold standard PCR method for the detection of SARS-CoV-2, so the typical sensitivity and specificity data are not available. Instead, the sensitivity is indicated by the limit of detection (LOD). The PCR assay (Cepheid, Sunnyvale, CA) used in this study has a LOD of 100 RNA transcript copies/ml (Zhen et al), which shows equivalent performance compared to the PCR developed by the Centers of Disease Control and Prevention (Lieberman et al). This information and reference have been added to the manuscript on line 201.

2) Likewise, the anti-body testing

<u>Authors' response</u>: In symptomatic infections this assay is reported to be 99.9% specific and 100% sensitive 13 days after PCR positivity (Bryan et al). This information and reference have been added to the manuscript on line 227.

3) Since we don't know what positive antibodies mean, the call for reflexive testing seems premature;

<u>Authors' response</u>: Thank you for your feedback on this point. The authors' goal in the article was not to be prescriptive for reflexive testing, rather to alert providers as to the possibility of prolonged viral shedding in the obstetric patient. Providers may find that consideration of antibody testing may be useful in determining the acuity of infection in an asymptomatic screen positive patient and guiding the interpretation of a positive PCR result. Our case demonstrates that patients screening positive for SARS-CoV-2 at time of hospital admission may not be due to an acute infection, but instead represent a remote infection. The development of IgG antibodies 2-4 weeks after acute infection suggests that the patient may be presenting with prolonged SARS-CoV-2 RNA shedding, as opposed to asymptomatic or presymptomatic acute infection. This may inform providers as to their degree of infectivity and have the potential to guide subsequent counseling and management.

We recognize that this point may have been unclear in the original manuscript. The discussion section has been edited to better reflect the literature and the potential relevance of antibody testing in the screening population.

4) To include 1 and 2, please shorten Discussion;

<u>Authors' response</u>: The Discussion has been edited to reflect Reviewer and Editor comments, keeping below the maximum word count.

5) You make at least one primacy claim-this and all of them need to be supported by a detailed literature search;

<u>Authors' response</u>: Thank you for this suggestion. The authors have added a statement regarding the literature search performed with PubMed and Google Scholar to support this claim. It is now located on line 232.

6) Some quantitative sense of how long PCR has been positive in patients with comorbidities should be included;

<u>Authors' response</u>: COVID-19 patients with prolonged viral shedding have been reported to have a median viral RNA shedding of 53 days after symptomatic relief, but can occur as long as 83 days. This has been added to line 161.

7) A figure (timeline of testing) might be good

<u>Authors' response</u>: Thank you for this suggestion. We have included a table reflecting the maternal testing timeline for your reference and consideration for publication. The authors recognize that the addition of this table does place our manuscript just over 2,000 words (2,044 words).

8) Please try not to use the word "population" so much

<u>Authors' response</u>: Thank you for your feedback. Multiple edits throughout the paper have been made to limit this redundancy.

REVIEWER #2:

Abstract

1 - Seems unnecessary to put decimal points for gestational age & not even clear whether 28.2 means and 1 day (.14) or 2 days (.28) - just causes distraction

<u>Authors' response</u>: Thank you for this correction. We have edited all locations where gestational age was referenced.

Case

2 - Line 87 - presumably she was sent home to quarantine (?)

<u>Authors' response</u>: Yes, she was sent home and advised to self-quarantine. We have added this for clarity on line 94.

3 - Line 95 - when the positive result came back (in how long), what was the thinking and what precautions were taken?

<u>Authors' response</u>: The PCR result on this patient returned under 2 hours (1 hour, 39 minutes) after collection. Having been aware of her SARS-CoV-2 RT-PCR earlier in pregnancy, this finding upon hospital admission was certainly unexpected. Given the uncertainty of so many aspects of this disease process, including the clinical significance of a positive SARS-CoV-2 RNA result remote from acute infection, we opted to take all precautions as though she was newly diagnosed and managed her per our unit protocols for COVID-19 positive patients. We also counseled the patient on neonatal contact precautions including the recommendation for newborn separation in the setting of maternal COVID-19 infection, which she declined. We have included additional wording starting on line 102 to provide information regarding how we managed this finding.

4 - Line 107 - why is the patient undergoing weekly COVID testing?

<u>Authors' response</u>: Given the unexpected finding of prolonged SARS-CoV-2 RNA presence in this patient coupled with the risk of potential newborn exposure, we opted to proceed with the Centers for Disease Control "test-based strategy" for asymptomatic patients to provide her guidance and reassurance for when transmission-based precautions should be discontinued. This

testing strategy calls for negative results from "at least 2 consecutive respiratory specimens collected > 24 hours apart". The frequency of this testing is not specified by the CDC, therefore we chose to proceed with approximately weekly testing. To clarify the justification for postpartum testing for the reader, we have included our explanation (line 171) and CDC reference in the manuscript revision.

Discussion

5 - Line 115 - Unclear what is meant by 'has documented a temporal course' (same comment line 159)

<u>Authors' response</u>: Thank you for bringing this to our attention. We have removed the wording "temporal" in both locations and revised the discussion to better describe the sequence of events that are expected as it relates to timing of viral clearance, antibody conversion, etc. It is our hope that these revisions provide greater clarity.

6 - Line 133 - is the reader to understand that these patients are potentially infectious? what is to be done? quarantine for 90 days and beyond or is she not contagious?

Authors' response: Given the novel nature of our case, the clinical and infectious implications of these findings are unknown and therefore no recommendations exist for this scenario. Based on limited studies, it appears that viral infectivity, defined as the ability to culture live SARS-CoV-2 from patient samples, resolves within 8-9 days after onset of symptoms, even in the presence of ongoing RT-PCR positivity. The degree of infectivity in our patient was not determined by attempted viral culture, nor has this infectivity assessment been studied in the obstetrical patient. It is this fact to which we believe documentation of antibody presence in a SARS-CoV-2 RT-PCR screen positive patient may be useful to identify those with remote infection and perhaps decreased infectivity than an acutely infected patient. Although a Case Report cannot prove such relationships, our manuscript serves to generate hypotheses that require further study that may guide clinical management and recommendations in the future.

EDITOR'S COMMENTS:

- **37.** Please state that this was a nasopharyngeal swab for PCR just to make it very clear. Authors' response: Thank you. This addition has been made.
- 38. What EGA was she when she presented for delivery? Why did you do antibody testing at 36 weeks? You could make this clearer by saying "At 36 weeks x days, antibody seroconversion was noted. At 38 weeks x days when she presented for delivery, SARS-CoV-2 PCR testing on nasopharyngeal swab was positive, 10 weeks after acute infection". Its not clear either why you repeat tested her either for antibody or for PCR at delivery. Were these done for research purposes?

Authors' response: Thank you for your suggested revisions to improve clarity of this section. We have made the revision as you have suggested. To address your additional questions, she was 38 1/7 weeks at presentation for delivery. Given the uncertainty of antibody formation in the setting of mild disease, as experienced by our patient, the patient herself requested antibody testing be performed at 36 weeks. We did not repeat her antibody testing at the time of delivery. Her PCR testing was repeated at time of delivery due to hospital protocol requiring SARS-CoV-2 PCR testing upon admission to our obstetric unit. We have included edits in the abstract and text of the Case Description to clarify why this repeat RT-PCR testing was performed at time of delivery.

39. By saying "continues to remain detectable" this reader is left with thinking a follow up paper will result and that this is an unfinished story. Again, also not sure why you are continuing to test her. Is there a clinical indication? Perhaps this should read "SARS-CoV-2 testing remained positive 21 days post partum, 91 days from her initial test."

Authors' response: Thank you for your comments. Since our initial submission, the patient continues to test positive, now 34-days postpartum and 104-days from her initial positive test. As we have yet to obtain a negative result, we do not know the duration to which her testing will ultimately remain positive. The statement on line 39 (line 129 on the tracked version) was revised to reflect your suggested wording. Should our manuscript be accepted for publication,

we are happy to update this information as you see fit during the course of the editorial process. Although an endpoint has not yet been reached, we felt the information provided in this case report was necessary to share with the obstetric community as quickly as possible in order to bring awareness that a COVID-19 asymptomatic screen positive patient on an obstetric unit may have had a remote infection with markedly prolonged shedding rather than an acute asymptomatic or presymptomatic infection.

Reviewer #2 shared a similar question (question #4) as to why we have continued testing. Given the unexpected finding of ongoing positivity, the patient was understandably distressed by this result and had multiple questions regarding risks to her family and newborn baby. Therefore, we opted to proceed with the CDC's recommended "test-based strategy" of achieving 2 consecutive negative PCR results to provide guidance as to when it is recommended she could discontinue transmission-based precautions. This rationale is now described in the manuscript.

42. Might this be better as "Prolonged shedding of SARS-CoV-2 may occur in the pregnant patient. If prevalent, this complicates the interpretation of a positive SARS-CoV-2 PCR test in the asymptomatic pregnant patient"

<u>Authors' response</u>: Thank you for this revision. We have edited this statement to reflect your suggestion.

56. Not sure how this teaching point is illustrated in your paper.

<u>Authors' response</u>: On review of your and the other Reviewers' comments, we recognized that this point may not have been clearly explained. The Discussion section has been revised to reflect the relevance of antibody testing as it relates to its potential utility in distinguishing an acute asymptomatic or presymptomatic infection from a remote infection based on the documented timeframe of antibody development relative to the acute disease state.

78/79. These are known as primacy claims: yours is the first, biggest, best study of its kind. In order to make such a claim, please provide the data bases you have searched (PubMED, Google Scholar, EMBASE for example) and the search terms used. IF not

done, please edit it out of the paper. One might reasonably ask if its important that it's the first.

<u>Authors' response</u>: Thank you for identifying this omission. Both PubMED and Google Scholar searches were utilized to make these primacy claims. The details of these searches have been included within the manuscript on line 232. The authors agree that being the first to describe a finding is not always relevant. To date, numerous articles have described the clinical course and outcomes of COVID-19 infection in the pregnant patient, yet there is a paucity of obstetrically based SARS-CoV-2 / COVID-19 research in regards to prolonged shedding, infectivity, or course of seroconversion when compared to that being reported in the non-pregnant population. Referencing the primacy of this case sought to highlight this void in the current literature.

Please explain in your case report the reason for all of the different testing you've done for SARS Co-V 2.

<u>Authors' response</u>: This information has been added to the Case Description and Text sections of the manuscript.

96. Virginia Apgar was an anesthesiologist who developed a scoring system to assess need for neonatal resuscitation. Please edit the spelling of this scoring system in your paper, as it is not an acronym and should be spelled "Apgar".

Authors' response: Thank you for identifying this error. This has been corrected.

129. Might it be important to offer that one explanation for her prolonged shedding is something idiosyncratic to this individual person whose immune system may result in delayed clearance and that it is not at all related to her pregnancy? Your paper makes an appropriately strong suggestion that its possible that pregnancy state itself is the cause and begs for a systematic study, but at this point its hypothesis generating.

<u>Authors' response</u>: Thank you for this suggestion. The patient is a healthy woman with no known autoimmune or medical co-morbidities that would suggest she should have delayed clearance, but we are certainly in agreement with your suggestion that there is always a possibility that this finding is idiosyncratic to this individual. We have included this alternative explanation in our discussion on line 167.

159. Again, I'm not sure how your paper suggests a temporal relation. Can you explain further?

Authors' response: This sentiment was shared by your fellow reviewers and prompted us to reevaluate how this relationship was described in our manuscript. We have revised the discussion to better explain the sequence of events that are expected as it relates to timing of viral clearance, antibody conversion, etc. The temporal relationship we are seeking to explain to the reader is that the presence of maternal antibodies signifies that she is likely at least 2 weeks beyond her acute infection. This may have clinical relevance as it relates to infectivity and the development of symptoms as compared to an acutely infected patient. It is thought that true infectivity, as defined as the ability to culture the virus, diminishes just over 1 week after onset of symptoms. Therefore, the temporal relationship as it relates to the development of antibodies may assist the clinician in differentiating patients with acute infection from those with prolonged shedding, and therefore understand the risk of infectivity for the patient, neonate, and hospital staff. Although our Case Report does not serve to prove these relationships and further study is required before definitive claims can be made, it allows the reader to consider that not all asymptomatic SARS-CoV-2 RNA screen positive patients are acutely infected and antibody testing may assist in making this distinction.

Did you alter any management of the patient intrapartum or post partum because of the known prolonged positive PCR or did you manage her and the baby as you would if you had been unaware of the earlier positive testing? How would a positive antibody test in the presence of a positive PCR result change your management, or did it?

Authors' response: Thank you for this question, which was also proposed by Reviewer #2. Given the uncertainty of so many aspects of this disease process, including the clinical significance of a positive SARS-CoV-2 RNA result remote from her acute infection, we opted to take all precautions as though she was newly diagnosed and managed her per our unit protocols for COVID-19 positive patients, including respiratory and droplet precautions, as well as patient isolation. We also counseled the patient on neonatal contact precautions including the recommendation for newborn separation in the setting of maternal COVID-19 infection, which she declined.

Given that our patient's infection had been documented 10 weeks earlier by a positive RT-PCR result, the knowledge of her antibody status 2 weeks prior to delivery was not as clinically useful in her case. We believe her testing timeline is likely the exception rather than the rule for most patients for a number of reasons. It is suggested that there is an increased incidence of mild or asymptomatic infection in the pregnant patient, therefore it is extremely likely that these mild infections will not been tested. If prolonged RNA shedding, as seen in our patient, is widespread, those that were not previously tested will be presenting to labor and delivery weeks or months after an acute infection and test positive by RT-PCR. One would logically assume that this was an acute asymptomatic or presymptomatic infection - when in fact it may have occurred far before presentation. However, until more is studied on the phenomena of prolonged shedding in the seroconverted obstetric patient, we do not believe that management should be altered and precautions should be taken whenever SARS-CoV-2 RNA is detected. That being said, counseling based on the non-obstetric literature regarding the likelihood of remote infection in the setting of seroconversion and the implications for infectivity therein may be of utility to provide some reassurance to the understandably worried screen positive patient.

EDITORIAL OFFICE COMMENTS:

- 1. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:
- A. OPT-IN: Yes, please publish my point-by-point response letter.
- B. OPT-OUT: No, please do not publish my point-by-point response letter.

The authors choose to "Opt-In".

Please check with your coauthors to confirm that the disclosures listed in their eCTA forms are correctly disclosed on the manuscript's title page.

There are no disclosures cited.

Siu-Kei Chow will need to complete our electronic Copyright Transfer Agreement, which was sent to them by email through Editorial Manager.

This has been completed.

3. You state, "This case demonstrates a favorable maternal and neonatal outcome in the setting of the longest reported presence of viral RNA by nasopharyngeal sampling after acute infection and post seroconversion in the current literature." It would help readers if you provide details of a literature search to support this statement. Include the database(s) searched, dates searched (including years) and search terms.

Thank you. Details of our literature search have been added to the manuscript on line 232.

12. Line 79: Your manuscript contains a priority claim. We discourage claims of first reports since they are often difficult to prove. How do you know this is the first report? If this is based on a systematic search of the literature, that search should be described in the text (search engine, search terms, date range of search, and languages encompassed by the search). If it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.

Thank you. Details of our literature search have been added to the manuscript on line 232.