

OBSTETRICS & GYNECOLOGY



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

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

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.

Date: 02/10/2023
To: "Diane Christopher" [REDACTED]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-22-2181

RE: Manuscript Number ONG-22-2181

Vaginal Corrosion due to Insertion of 9 Volt Battery – Case Report

Dear Dr. Christopher:

Thank you for sending us your work for consideration for publication in Obstetrics & Gynecology. Your manuscript has been reviewed by the Editorial Board and by special expert referees. The Editors would like to invite you to submit a revised version for further consideration.

If you wish to revise your manuscript, please read the following comments submitted by the reviewers and Editors. Each point raised requires a response, by either revising your manuscript or making a clear argument as to why no revision is needed in the cover letter.

To facilitate our review, we prefer that the cover letter you submit with your revised manuscript include each reviewer and Editor comment below, followed by your response. That is, a point-by-point response is required to each of the EDITOR COMMENTS (if applicable), REVIEWER COMMENTS, and STATISTICAL EDITOR COMMENTS (if applicable) below.

The revised manuscript should indicate the position of all changes made. Please use the "track changes" feature in your document (do not use strikethrough or underline formatting).

Your submission will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by 03/03/2023, we will assume you wish to withdraw the manuscript from further consideration.

EDITOR COMMENTS:

Please note the following:

* Help us reduce the number of queries we add to your manuscript after it is revised by reading the Revision Checklist at https://journals.lww.com/greenjournal/Documents/RevisionChecklist_Authors.pdf and making the applicable edits to your manuscript.

* Figures 1-4: Please upload all figures as figure files on Editorial Manager.

REVIEWER COMMENTS:

Reviewer #1: Thank you for the opportunity to participate in the peer review. I have the following questions and comments.

Main comments:

1. Subject matter. Reports of vaginal insertion of large alkaline batteries have not been described, so this would be helpful to clinicians.
2. Consent-typically case reports require patients to consent to publication, which includes photos and videos. As a peer reviewer, I can only see "line 126: informed consent: yes" but no other details. Please explain how this was handled in a patient with mental illness. Did the patient have the capacity to consent to publication? If not, then what rules did the authors follow?
3. Compassionate patient-centered care which meets standards.

I am not taking a stand in judging the clinical course of this patient since I am a gynecologist and clinician myself, and have plenty of cases like this one where things did not go as I would have liked. However, in cases where things do not go well, the main thing is to reflect on why this happened, what blindsided me, and how I can prevent this from happening in the future. Reading this report as is, my heart was breaking for this patient (and not because of vaginal burns) and I was left unsure of why and how this course of events unfolded and what follow-up she had. Here are some examples of problematic areas:

A. The entire report reads as a "stick it to anesthesia, I told you so!" Basically, this was an after-hours add-on (who wants to do an exam under anesthesia and a vaginal washout at 530 pm?). The anesthesia team requested 6 hours of NPO (which we know for exams under anesthesia is not even evidence-based), which then prompted medicine and gynecology teams to call in a toxicology consult, and even call poison control to be the parent to break up a dispute between GYN and anesthesia. A gynecologist was advocating for a female patient with mental illness. I can only imagine how that went over with the anesthesiologist who was running the board. Instead of this course of events, I suggest considering the following: -acknowledge that anesthesia behavior was inappropriate. They should have listed to the surgeons, in this case, the gyn team. Hopefully went into anesthesia QI or some other sort of peer review where that individual was educated to avoid this from happening in the future. As it stands, anesthesia delay is the sole reason why this patient ended up with chemical 3rd-degree vaginal burns. Maybe even consider an intervention (see discussion and social media chatter in below as an example).

[https://www.jpedsurg.org/article/S0022-3468\(22\)00772-2/fulltext#articleInformation](https://www.jpedsurg.org/article/S0022-3468(22)00772-2/fulltext#articleInformation)

<https://twitter.com/CaseySeidemanMD/status/1607834139813908480>

B. Abuse, mental illness, social determinants of health.

From the reader's standpoint, I kept wondering about the questions below but could not find answers in the paper: -line 48-49- "history of self-injury and trauma"—details?

-lines 49-50: admitted after injection of AAA batteries, discharged on HD 10, readmitted in 24 hours after nail injection. What were social work and psych doing during those hospitalizations?

-line 52-after nail ingestion, she is admitted to medicine with psych following. She should have been getting 1:1 care (under direct watch 24/7) which would have prevented all of the insertions theoretically if she could not go to the psych ward (I assume they refused to take her because she was not medically cleared but please clarify). Good mental health care could have potentially prevented all of the insertions described in the report.

-line 52: insertion of straw and toilet paper"—no mention of what was done to address this

-line 55: "the patient was living in a group home with a reported recent history of abuse at this location" "—no mention of what was done to address this

-table "psychiatry told me to go back to the group home, I was scared" "—no mention of what was done to address this

-line 98-case ends at POD9. What happened to her gynecologically and psychiatrically? Do authors think longer follow was warranted given the possibility of long-term sequelae?

Her self-harm appears consistent, unresolved, untreated, and unaccessed and our medical system is trying to get rid of her from the hospital and send her back to abuse in a group home.

I am only reflecting based on the information that is presented in the manuscript.

To me, as a reader, it seems that instead of focusing on her vagina because it is interesting, we should be focusing on her social determinants of health to address her problems and see her as a human, right?

Other comments:

4. Table 1 helpful summary of existing reports

5. Line 87-pre-op timeline helpful in understanding why the delay happened and how it was handled

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Al-Oufi D, Alkharboush HM, Younis ND, Abu-Zaid A. Disk Battery as a Vaginal Foreign Body in a Five-Year-Old Preadolescent Child. *Cureus*. 2021 Mar 6;13(3):e13727. doi: 10.7759/cureus.13727. PMID: 33842106; PMCID: PMC8020610.

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Surg Rep. 2022 Sep 19;10(1):e135-e140. doi: 10.1055/a-1920-5849. PMID: 36133643; PMCID: PMC9484869.

7. The report is missing the teaching points section (<https://journals.lww.com/greenjournal/Pages/InformationforAuthors.aspx#II-C>): Teaching Points: Please include a list of one to three lessons for clinical management that derive from your manuscript.

Reviewer #2: Well written. Interesting topic and thorough discussion.

Timeline table could be condensed.

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Sincerely,
Jason D. Wright, MD
Editor-in-Chief

The Editors of Obstetrics & Gynecology

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.

Feb 23, 2023

Dear Reviewers:

Thank you for taking the time to review our case report. We have replied to the feedback as written below. We are open to remaining edits as you see necessary.

Best,
Authors

REVIEWER COMMENTS re: Battery Case Report

Reviewer #1: Thank you for the opportunity to participate in the peer review. I have the following questions and comments.

Main comments:

1. Subject matter. Reports of vaginal insertion of large alkaline batteries have not been described, so this would be helpful to clinicians.

Response 1. Thank you for taking the time to review our case report.

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Response 2. We evaluated the patient and determined she had capacity to consent for her necessary surgical procedures and thus had the capacity to consent for publication. Psychiatry agreed with our assessment for capacity. A written consent was obtained prior to submission.

3. Compassionate patient-centered care which meets standards.

I am not taking a stand in judging the clinical course of this patient since I am a gynecologist and clinician myself, and have plenty of cases like this one where things did not go as I would have liked. However, in cases where things do not go well, the main thing is to reflect on why this happened, what blindsided me, and how I can prevent this from happening in the future. Reading this report as is, my heart was breaking for this patient (and not because of vaginal burns) and I was left unsure of why and how this course of events unfolded and what follow-up she had. Here are some examples of problematic areas:

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call in a toxicology consult, and even call poison control to be the parent to break up a dispute between GYN and anesthesia. A gynecologist was advocating for a female patient with mental illness. I can only imagine how that went over with the anesthesiologist who was running the board. Instead of this course of events, I suggest considering the following:

-acknowledge that anesthesia behavior was inappropriate. They should have listed to the surgeons, in this case, the gyn team. Hopefully went into anesthesia QI or some other sort of peer review where that individual was educated to avoid this from happening in the future. As it stands, anesthesia delay is the sole reason why this patient ended up with chemical 3rd-degree vaginal burns. Maybe even consider an intervention (see discussion and social media chatter in below as an example).

[https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jpedsurg.org%2Farticle%2FS0022-3468&data=05%7C01%7Cdiane.christopher%40cuanschutzu.edu%7C70c924482678476e459b08db0b6aa15b%7C563337caa517421aaae01aa5b414fd7f%7C0%7C0%7C638116324992473056%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=P9xueDjdGzu1TLi%2Ftzc3MSC1R2t3Hgn3CJNWDyD%2FTcE%3D&reserved=0\(22\)00772-2/fulltext#articleInformation](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jpedsurg.org%2Farticle%2FS0022-3468&data=05%7C01%7Cdiane.christopher%40cuanschutzu.edu%7C70c924482678476e459b08db0b6aa15b%7C563337caa517421aaae01aa5b414fd7f%7C0%7C0%7C638116324992473056%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=P9xueDjdGzu1TLi%2Ftzc3MSC1R2t3Hgn3CJNWDyD%2FTcE%3D&reserved=0(22)00772-2/fulltext#articleInformation)

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Response 3A. Our goals in submitting this case report was to fill a gap that we identified. Because this case had a very accurate timeline, we felt this would be valuable to clinicians for care of similar patients. The Gynecology attending did have the ability to supersede requests from the OR staff and anesthesia to wait for NPO. However, due to the lack of data and other emergent cases in the line for the operating room, we did not push the case to be an emergency surgery.

The following changes were made from line 63-74 to better reflect our goals as stated above as our focus is on patient safety. In addition, all staff involved in the case were made aware of the outcomes for this patient. We hope that publishing this article will help disseminate the information as well.

B. Abuse, mental illness, social determinants of health.

i. From the reader's standpoint, I kept wondering about the questions below but could not find answers in the paper:

-line 48-49- "history of self-injury and trauma"—details?

Response i. We modified lines line 49-52: “The patient was living in a group home with reported recent history of abuse at this location. Upon multiple previous medically managed hospitalizations, she had repetitively orally ingested inedible objects.”

ii. lines 49-50: admitted after injection of AAA batteries, discharged on HD 10, readmitted in 24 hours after nail injection. What were social work and psych doing during those hospitalizations?

Response ii. We modified lines 52-56 to address involvement of social work and psychiatry who were both closely following her throughout her admissions. “Within 24 hours, she was readmitted due to ingestion of a nail to the medicine service as our hospital does not have an inpatient psychiatry unit on site. Psychiatry and General Surgery teams as well as Social Work were consulting services and patient had a 1:1 in person sitter observing her.”

Social work was consulted immediately upon admission for this patient given her complex housing needs and reports of abuse with the knowledge that placement at a new group home was imperative to her safe discharge. Social work continued to follow this patient through the entirety of her admission.

iii. line 52-after nail ingestion, she is admitted to medicine with psych following. She should have been getting 1:1 care (under direct watch 24/7) which would have prevented all of the insertions theoretically if she could not go to the psych ward (I assume they refused to take her because she was not medically cleared but please clarify). Good mental health care could have potentially prevented all of the insertions described in the report.

Response iii. Unfortunately, our hospital has no inpatient psychiatry unit. Please see line 55-57 as above.

iv. line 52: insertion of straw and toilet paper"—no mention of what was done to address this

Response iv. Line 58-60 were changed to address: "Gynecology was consulted and after obtaining consent, objects were removed from the introitus under oral sedation which was well tolerated by the patient."

v. line 55: "the patient was living in a group home with a reported recent history of abuse at this location" "—no mention of what was done to address this

*Response v. Thank you for the feedback. We have made the following changes:
Line 129: “Ultimately after thorough medical and psychiatric clearance was discharged to a new group home. She resumed psychiatric care with her outpatient provider”.*

vi. table "psychiatry told me to go back to the group home, I was scared" "—no mention of what was done to address this

Response vi. Line 138-141: “Ultimately after thorough medical and psychiatric clearance was discharged to a new group home. She resumed psychiatric care with her outpatient provider”.

vii. line 98-case ends at POD9. What happened to her gynecologically and psychiatrically? Do authors think longer follow was warranted given the possibility of long-term sequelae?

Response vii. The patient had serial vaginal examinations under anesthesia with a state of healing observed. Given she could not tolerate exams without anesthesia her primary team was given instructions and precautions to re-consult us. She remained inpatient for 8 weeks after this initial event for medical care and safe placement. Please see changes on line 138.

viii. Her self-harm appears consistent, unresolved, untreated, and unaccessed and our medical system is trying to get rid of her from the hospital and send her back to abuse in a group home.

I am only reflecting based on the information that is presented in the manuscript.

To me, as a reader, it seems that instead of focusing on her vagina because it is interesting, we should be focusing on her social determinants of health to address her problems and see her as a human, right?

Response viii. We agree that the patient's psychiatric diagnosis is the primary concern. Following the removal of the battery the attending gynecology physician called the primary team and encouraged them to transfer the patient to a primary psychiatric unit. Given ingestion of the nail this was not possible due to her ongoing medical and surgical needs. This is a known challenge to our academic medical center. As a result of many challenging cases, inpatient psychiatry will be added back to the campus in the next year. We have made the following changes:

Line 140: " Additionally, our hospital has plans to regain an inpatient psychiatry unit which will better serve complex psychiatric patients with ongoing medical needs. "

Other comments:

4. Table 1 helpful summary of existing reports

5. Line 87-pre-op timeline helpful in understanding why the delay happened and how it was handled

6. Do the authors consider the references below relevant?

Al-Oufi D, Alkharboush HM, Younis ND, Abu-Zaid A. Disk Battery as a Vaginal Foreign Body in a Five-Year-Old Preadolescent Child. *Cureus*. 2021 Mar 6;13(3):e13727. doi: 10.7759/cureus.13727. PMID: 33842106; PMCID: PMC8020610.

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Response 6. Thank you for the additional references. The above references are case reports of button batteries in pre-menarcheal patients. Per conversations with toxicology and with

literature review the mechanism of action and adverse effects of button batteries are significantly different than alkaline batteries. We do include one report of button batteries in our references.

7. The report is missing the teaching points section

(<https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjournals.lww.com%2Fgreenjournal%2FPages%2FInformationforAuthors.aspx%23II-C&data=05%7C01%7Cdiane.christopher%40cuanschutz.edu%7C70c924482678476e459b08db0b6aa15b%7C563337caa517421aaae01aa5b414fd7f%7C0%7C0%7C638116324992473056%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=U9zBlch8P2u2SNdIRInImp955g3gpEJhUIpjjzIa%2FCs%3D&reserved=0>): Teaching Points: Please include a list of one to three lessons for clinical management that derive from your manuscript.

Response 7. Thank you for the recommendation. Our teaching points are listed beginning Line 168:

- 1. Vaginal alkaline battery insertion in a post-menarcheal patient poses a significant risk for vaginal corrosion.*
- 2. Emergent removal of vaginally inserted batteries is recommended.*
- 3. Multi-disciplinary approach should be utilized to address medically and psychiatrically complex patients.*

Reviewer #2: Well written. Interesting topic and thorough discussion.

Thank you for taking the time to review our case report.

Timeline table could be condensed.

Understood. Please see edits made to the pre-operative timeline table in Line 119.

Thank you again for considering our case report.