

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)*
- Email correspondence between the editorial office and the authors*

**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: Aug 13, 2018
To: "Kim Nguyen" [REDACTED]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-18-1226

RE: Manuscript Number ONG-18-1226

Massive Hemorrhage - When Treatment Becomes the Disease: A Case Report of Iatrogenic Uterine Rupture

Dear Dr. Nguyen:

Your manuscript has been reviewed by the Editorial Board and by special expert referees. Although it is judged not acceptable for publication in Obstetrics & Gynecology in its present form, we would be willing to give further consideration to a revised version.

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).

Your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Sep 03, 2018, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1:

This is an interesting manuscript with a purpose to discuss a case of possible iatrogenic uterine rupture following ultrasound guided placement of a Bakri(R) balloon. This was a case report.

1. Could the authors expand on the surgical procedure? What type of skin and hysterotomy incision were made? Was there any difficulty in delivering the infant? What was the weight of the infant? After delivering the placenta, was the hysterotomy incision closed after exteriorizing the uterus or was it closed without exteriorizing the uterus? Were the surgeons able to carefully inspect the lower uterus especially distal and lateral to the hysterotomy incision for any extensions or uterine rupture? What was the Estimated blood loss at the time of the cesarean section?
2. The authors note "Postoperative fundal exams expressed large amounts of fresh blood, and aggressive resuscitation was required to treat ongoing blood loss. A bedside ultrasound showed no evidence of either retained products of conception or large blood clots." Could the authors expand on the physical examination? What were the vital signs? What was the size and consistency of the uterine fundus on examination? Was the fundus firm or boggy? On ultrasound they note no retained POC or clots: does this mean the uterus was contracted down?
3. The authors note that after placing the Bakri (R) balloon the patient had severe pain during fundal examinations. Was the fundus firmly contracted down? Did they perform an ultrasound at this time? What were the patient's vital signs? What was the hemoglobin?
4. In figure 1, the authors note that "the rupture site was closed to achieve hemostasis before hysterectomy performed." If hemostasis was achieved, why did they perform the hysterectomy?

Reviewer #2:

This is a case report documenting uterine rupture that presumably resulted from excessive intrauterine pressure exerted by a Bakri balloon used to tamponade uterine atony after a cesarean delivery for complete placenta previa.

I have a few questions that I think the manuscript should address:

1. Please indicate if other medical efforts to control bleeding were used (e.g., Hemabate, vasopressin, etc.)

2. I presume the cervix was not open at the time of cesarean. How did a full balloon fit through a small opening? Is it possible the rupture was actually a cervical fistula through which the balloon passed? Is it possible the rupture was overlooked at the time of cesarean?
3. Could the authors opine as to why the rupture occurred outside the suture line rather than through it?
4. How did the presence of a previa in the lower segment affect the risk of this complication?
5. The figure indicates the uterine rupture was repaired. Why?
6. What anesthetic agents were used for the reexploration? Were they uterine relaxant?
7. Is there any evidence that the balloon was in proper position when first placed? Was there any bleeding from the balloon channel during the time it was presumed to be in place? If it was initially placed in the lower uterus leaving space above it for blood to accumulate and putting excess pressure on the lower uterine segment, could that explain what happened?

I think the Discussion could be shortened substantially without altering the impact of the report.

EDITOR COMMENTS:

1. Thank you for your submission to Obstetrics & Gynecology. In addition to the comments from the reviewers above, you are being sent a notated PDF that contains the Editor's specific comments. Please review and consider the comments in this file prior to submitting your revised manuscript. These comments should be included in your point-by-point response cover letter.

The notated PDF is uploaded to this submission's record in Editorial Manager. If you cannot locate the file, contact Katie McDermott and she will send it by email – kmcdermott@greenjournal.org.

2. 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, as well as subsequent author queries. 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:

1. OPT-IN: Yes, please publish my response letter and subsequent email correspondence related to author queries.
2. OPT-OUT: No, please do not publish my response letter and subsequent email correspondence related to author queries.

3. A signed consent form must be obtained from each patient described in a case report. In all cases (photograph or video) in which a human image is shown (in part or whole), written consent must also be obtained. A sample form is available online at <http://edmgr.ovid.com/ong/accounts/release.pdf>. It is preferable to give the patient the opportunity to read the manuscript. Please state in the cover letter with your submitted manuscript that you have obtained a signed consent form and that this form will be filed with your records. Unless the editorial office requests that you do so, please do not submit the signed form to the journal.

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 will be transitioning as much as possible to use of the reVITALize definitions, and we encourage authors to familiarize themselves with them. The obstetric data definitions are available at <http://links.lww.com/AOG/A515>, and the gynecology data definitions are available at <http://links.lww.com/AOG/A935>.

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 appendixes).

Please limit your Introduction to 250 words and your Discussion to 750 words.

6. Titles in Obstetrics & Gynecology are limited to 100 characters (including spaces). Do not structure the title as a declarative statement or a question. Introductory phrases such as "A study of..." or "Comprehensive investigations into..."

or "A discussion of..." should be avoided in titles. Abbreviations, jargon, trade names, formulas, and obsolete terminology also should not be used in the title. Titles should include "A Randomized Controlled Trial," "A Meta-Analysis," or "A Systematic Review," as appropriate, in a subtitle. Otherwise, do not specify the type of manuscript in the title.

7. Specific rules govern the use of acknowledgments in the journal. Please edit your acknowledgments or provide more information in accordance with 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 signature on the journal's author agreement 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).

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 limits for different article types are as follows: Case Reports, 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. Figure 1: Please upload a version without arrows. These will be added back per journal style.

When you submit your revision, art saved in a digital format should accompany it. If your figure was created in Microsoft Word, Microsoft Excel, or Microsoft PowerPoint formats, please submit your original source file. Image files should not be copied and pasted into Microsoft Word or Microsoft PowerPoint.

When you submit your revision, art saved in a digital format should accompany it. Please upload each figure as a separate file to Editorial Manager (do not embed the figure in your manuscript file).

If the figures were created using a statistical program (eg, STATA, SPSS, SAS), please submit PDF or EPS files generated directly from the statistical program.

Figures should be saved as high-resolution TIFF files. The minimum requirements for resolution are 300 dpi for color or black and white photographs, and 600 dpi for images containing a photograph with text labeling or thin lines.

Figures should be no smaller than the journal column size of 3 1/4 inches. Art that is low resolution, digitized, adapted from slides, or downloaded from the Internet may not reproduce. Refer to the journal printer's web site (<http://cjs.cadmus.com/da/index.asp>) for more direction on digital art preparation.

If you choose to revise your manuscript, please submit your revision via Editorial Manager for Obstetrics & Gynecology at <http://ong.editorialmanager.com>. It is essential that your cover letter list point-by-point the changes made in response to each criticism. Also, please save and submit your manuscript in a word processing format such as Microsoft Word.

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

Again, your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Sep 03, 2018, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Nancy C. Chescheir
Editor in Chief of Obstetrics & Gynecology

2017 IMPACT FACTOR: 4.982
2017 IMPACT FACTOR RANKING: 5th out of 82 ob/gyn journals

If you would like your personal information to be removed from the database, please contact the publication office.

Nancy C. Chescheir, MD
Editor-in-Chief
Obstetrics & Gynecology
409 12th Street, SW
Washington, DC 20024

Submission Date: June 20, 2018
Revision Date: September 3, 2018

Dear Dr. Chescheir,

Please accept revisions of our manuscript, “When Treatment Becomes the Disease: Massive Hemorrhage from Suspected Iatrogenic Uterine Rupture.” Our initial submission to *Obstetrics & Gynecology* on June 20, 2018 was returned with a number of insightful reviewer comments, suggestions and request for revision. We have sought additional input and review of the case, and worked to strengthen the report with reviewer comments integrated. Following is a detailed review of each inquiry and our response.

Reviewer #1:

1. Could the authors expand on the surgical procedure?
 - a. Changes have been made to the ‘Case’ section to expand on the surgical procedure.
2. What type of skin and hysterotomy incision were made?
 - a. Incision for the cesarean delivery was via Pfannenstiel incision and low transverse hysterotomy. (page 4, line 19-20)
3. Was there any difficulty in delivering the infant?
 - a. There was no difficulty or complications noted when delivering the infant. (page 4, line 19)
4. What was the weight of the infant?
 - a. The infant was 3090 grams. (page 5, line 20)
5. After delivering the placenta, was the hysterotomy incision closed after exteriorizing the uterus or was it closed without exteriorizing the uterus?
 - a. The hysterotomy incision was closed after exteriorizing the uterus. (page 4, line 20-23 to page 5, line 3)
6. Were the surgeons able to carefully inspect the lower uterus especially distal and lateral to the hysterotomy incision for any extensions or uterine rupture?
 - a. Yes, the surgeons noted they were able to inspect the lower uterus for abnormalities (extensions, rupture). (page 5, line 1-3)
7. What was the Estimated blood loss at the time of the cesarean section?
 - a. The estimated blood loss was 2500 mL at the end of the cesarean delivery. (page 5, line 3)
8. The authors note "Postoperative fundal exams expressed large amounts of fresh blood, and aggressive resuscitation was required to treat ongoing blood loss. A bedside ultrasound showed no evidence of either retained products of conception or large blood clots." Could the authors expand on the physical examination?

- a. On exam, her fundus was firm and the uterus well-contracted. Her cervix was dilated to 1.5cm. (page 5, line 7-8)
9. What were the vital signs?
 - a. Her vital signs were stable without the need of a phenylephrine infusion while in recovery. (page 5, line 14-15)
10. What was the size and consistency of the uterine fundus on examination? Was the fundus firm or boggy?
 - a. Her uterine fundus was noted to be firm and well-contracted on exam. (page 5, line 7-8)
11. On ultrasound they note no retained POC or clots: does this mean the uterus was contracted down?
 - a. Yes, the uterus was felt to be contracted down at this time. (page 5, line 7-8)
12. The authors note that after placing the Bakri (R) balloon the patient had severe pain during fundal examinations. Was the fundus firmly contracted down? Did they perform an ultrasound at this time?
 - a. The fundus was firmly contracted down. (page 5, line 7-8) Ultrasound was used only during placement and shortly after balloon placement. (page 5, 12-14) There was no evidence of the balloon being misplaced or rupturing through into the abdomen/pelvis.
13. What were the patient's vital signs?
 - a. In recovery, the patient's mean arterial pressure remained stable with mean arterial pressures above 65 without the need of a vasopressor infusion. (page 5, line 14-15) The patient did require a phenylephrine infusion during the laparotomy under general anesthesia but was quickly weaned off following surgery. (page 6, line 21-23)
14. What was the hemoglobin?
 - a. Her initial hemoglobin in recovery following the cesarean delivery was 9.5 g/dL. (page 5, line 16) Later, it fell to 6.9 g/dL prior to returning to the operating room for the emergent laparotomy. (page 6, line 11)
15. In figure 1, the authors note that "the rupture site was closed to achieve hemostasis before hysterectomy performed." If hemostasis was achieved, why did they perform the hysterectomy?
 - a. Due to ongoing bleeding from the rupture site, one surgeon quickly sutured the site while another surgeon began the hysterectomy. This was done simultaneously. (page 6, line 17-158)

Reviewer #2:

1. Please indicate if other medical efforts to control bleeding were used (e.g., Hemabate, vasopressin, etc.)
 - a. Oxytocin was used during the cesarean delivery to treat mild uterine atony. (page 5, line 5) In recovery, it was suspected that bleeding was from the placental site rather than atony given the uterus was firm and well-contracted, so no additional uterotonics were given and an intrauterine balloon tamponade device was placed. (page 5, line 7-12)
2. I presume the cervix was not open at the time of cesarean. How did a full balloon fit through a small opening?

- a. Her cervix was dilated to 1.5cm therefore the balloon was easily placed without complication. (page 5, line 8, line 12-14)
3. Is it possible the rupture was actually a cervical fistula through which the balloon passed?
 - a. It seems possible that during balloon placement, it may pass through the cervix into a fistula and then back into the uterus. Although this is a possibility, we believe it is unlikely this occurred since it would have resulted in two lacerations. If this occurred, surgeons would have expected significant bleeding from the cervix into her vagina at the time of placement. Furthermore, on ultrasound, the balloon device was correctly placed inside the uterus. The balloon would have had to go out of the cervix and then back into the uterus, which seems unlikely. Additionally, there was no evidence of cervical perforation or laceration at the time of hysterectomy. Although this may be a possibility when placing an intrauterine balloon tamponade, we feel like it is unlikely in this case.
4. Is it possible the rupture was overlooked at the time of cesarean?
 - a. It is unlikely that the rupture was overlooked at the time of cesarean delivery since surgeons performed a final inspection of the suture line and uterus (including the lower segment). If rupture was present, it likely would have been detected. (page 4, line 23; page 5, line 1-3)
5. Could the authors opine as to why the rupture occurred outside the suture line rather than through it?
 - a. We suspect that after suturing, the suture line can become the strongest part due to increased tensile strength of suture material. Therefore, other areas are relatively weaker and more prone to trauma or rupture. (page 7, line 23 to page 8, line 1)
6. How did the presence of a previa in the lower segment affect the risk of this complication?
 - a. On preoperative imaging and at the time of her cesarean delivery, her placenta was posterior. An anterior previa may have contributed to attenuated myometrium. Given that it was a posterior previa, we do not feel like it contributed to the uterine rupture.
7. The figure indicates the uterine rupture was repaired. Why?
 - a. Due to ongoing bleeding from the rupture site, one surgeon quickly sutured the site while another surgeon began the hysterectomy. This was done simultaneously. (page 6, line 17-18)
8. What anesthetic agents were used for the re-exploration? Were they uterine relaxant?
 - a. The patient underwent general anesthesia for the re-exploration, maintained with sevoflurane, which is a uterine relaxant. (page 6, line 12)
9. Is there any evidence that the balloon was in proper position when first placed?
 - a. The balloon was confirmed to be in the proper position inside the uterus when it was first placed. (page 5, line 13-14).
10. Was there any bleeding from the balloon channel during the time it was presumed to be in place?
 - a. Yes, there was initial blood drained into the collection bag after the placement of the balloon tamponade device. Initially there was 150ml, then 100ml and 150ml, respectively over the next two hours, followed by 30ml per hour for two hours. (page 5, line 16-19)
11. If it was initially placed in the lower uterus leaving space above it for blood to accumulate and putting excess pressure on the lower uterine segment, could that explain what happened?

- a. Yes, it is a possibility that increased uterine pressure causing rupture may have resulted from the accumulation of blood above the device or even the device itself. (page 7, line 21-23).

Editor-in-Chief:

1. Abstract

- a. Deleted abbreviations not listed on the approved list throughout abstract and manuscript
- b. Time course included (page 2, line 12)
- c. Used the trade name 'Bakri' once and replaced throughout manuscript
- d. Balloon was dislodged three hours following placement (page 2, line 12)
- e. Pain was constant, severe, and stabbing but worsened during the exam (page 2, line 11-12)
- f. The balloon was easily placed through the cervix (page 2, line 11)
- g. Added the location of the rupture instead of drawing a conclusion in the 'case' section. Intrauterine balloon tamponade contributing to iatrogenic rupture as a conclusion is listed in the conclusion section. (page 2, line 13-14)

2. Introduction

- a. Given the rareness of complications from intrauterine balloon tamponade devices, evidence is limited to prospective cohort studies and case series reports. (page 4, line 10-11)

3. Case

- a. Deleted information regarding neuraxial anesthesia since it is not relevant to the case.
- b. Information was added regarding her physical exam (well-contracted uterus), interventions (only balloon tamponade, no additional uterotonics given suspicion for placental site bleeding), pain level (following placement, worse on exam), and placement of the balloon. (page 5 line 7-23, page 6 line 1-2)
- c. The intrauterine balloon may have dislodged during fundal exam but the way it was detected to be malposition was due to an abrupt increased in output. With this abrupt output, an exam was done showing that the device was delivering through her cervix, which was now dilated to 4cm. (page 6, line 3-6)
- d. The blood was found to be dark, thin blood as well as clot free in the patient's pelvis and abdomen. (page 6, line 13-14)
- e. The rupture was described as linear although it is unlikely that the rupture was an extension of the hysterotomy given its discrete location and that the uterine was inspected closely before replacing the uterus in the abdomen. (page 6, line 14-16 and page 5, line 1-3)
- f. The rupture was 1cm *inferior* to the intact hysterotomy suture line without extension into the broad ligament. It was noted that the bladder flap was uncomplicated so unlikely related to that step of the procedure. (page 6, line 14-17)
- g. Estimated blood loss of 10L was during the entire birth process. (page 6, line 20)
- h. Further description of the pathologic specimen and laceration was added. The pathology report showed extensive acute hemorrhage and edema and large dilated

vessels in the anterior lower uterine segment. It also reported no signs of previa or accreta by pathology. (page 7, line 4-8)

4. Other comments

- a. We will also opt-in and agree to publishing our response letter and subsequent email correspondence related to author queries.
- b. A signed consent was obtained from the patient and kept in our records.
- c. Word count 1,991 words (<2000), Introduction 145 words (< 250), Discussion 412 words (<750).
- d. Edited title, no longer includes “A Case Report...” Characters: 97 (<100)
- e. Acknowledgement include one presentation listed with exact date and location. No financial support.
- f. Abstract with 125 words.
- g. Abbreviations and acronyms not found on the approved list have been deleted.
- h. Symbols such as (/) have been deleted except when expressing a measurement.
- i. A version of the figure without arrows as a high-resolution TIFF file, minimum resolution of 300 dpi was uploaded.
- j. Revisions submitted as a Microsoft Word document. When seen in Microsoft word (not as a PDF), “track changes” feature is present without strikethrough or underline formatting indicating all changes made.

Each of the authors confirms approval of the revised manuscript and affirms it has neither been previously published nor is currently under consideration by any other journal. Each author agrees to *Obstetrics & Gynecology* submission policies.

Thank you kindly for your consideration.

Sincerely,

Kim T. Nguyen
Northwestern University Feinberg School of Medicine



From: [REDACTED]
To: [Randi Zung](#)
Subject: Re: Your Revised Manuscript 18-1226R1
Date: Friday, September 7, 2018 6:50:02 AM
Attachments: [Bakri 9-7.docx](#)
[Bakri queries comments 9-7.docx](#)

Good morning,

Thank you for your email. We appreciate the queries and insightful comments. Attached are two documents:

- 1) Updated manuscript addressing the editors queries
- 2) Document with the queries and our responses (Author's point-by-point response document follows this email thread. RYZ)

Please let me know if you have any issues with the documents. We look forward to hearing back from you. Have a nice day.

Kind regards,
Kim Nguyen

From: Randi Zung <RZung@greenjournal.org>
Sent: Wednesday, September 5, 2018 9:07 AM
To: Kim Thuy Nguyen
Subject: Your Revised Manuscript 18-1226R1

Dear Dr. Nguyen:

Your revised manuscript is being reviewed by the Editors. Before a final decision can be made, we need you to address the following queries. Please make the requested changes to the latest version of your manuscript that is attached to this email. Please track your changes and leave the ones made by the Editorial Office. Please also note your responses to the author queries in your email message back to me.

1. General: The Editor has made edits to the manuscript using track changes. Please review them to make sure they are correct.
2. Page 4, Line 5: This is an important point. In your revisions, you note that the patient's fundus was firm and well contracted—apparently not atonic. Some might argue that the Balloon was contraindicated and that perhaps placing a balloon in a well-contracted uterus would be a scenario in which this complication may occur. Please comment in discussion section of paper. In your background section of your paper you make the case for using these balloons when placental site bleeding is suspected and you may wish to add that here as well.
3. Page 7, Line 3: Do you mean at the end of the cesarean? Given that large blood loss at that time, did you transfuse her? 2.5 liter loss at our place would have called for initiation of massive transfusion protocol.
4. Page 8, Line 9: So far I count up to another 2.50 liters of so of blood loss—total so far is 5 liters. Could you please provide a summative tally as you go along for the post operative losses:

EBL in RR prior to Bakri
EBL in first 4 hours of Bakri
EBL when the Bakri came out
TOTAL CS plus immediate post operative period prior to return to OR.

5. Page 9, Line 12: Traditional teaching, as you note earlier, is use of the balloon for atony, PPH from medical bleeding or surgical bleeding (lacerations) aren't typically settings where first line measure is tamponade.

6. Page 9, Line 22: Could its placement in a well contracted uterus be a risk factor? Given that you placed it in a well contracted uterus, your indication was apparently for placental site hemorrhage and you make the case for this in the introduction (although that could be beefed up a bit). Perhaps an important teaching point to consider—if you agree with it of course—is that when used in a well contracted uterus, the risk of uterine perforation at placement of with increasing intrauterine pressure may be risk factors and one should be alert to this possibility?

7. Page 9, Line 23: Is there any evidence that a contracted myometrium is less strong than a closed CS incision?

To facilitate the review process, we would appreciate receiving a response within 48 hours.

Best,
Randi Zung

— —

Randi Zung (Ms.)

Editorial Administrator | *Obstetrics & Gynecology*
American College of Obstetricians and Gynecologists
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Washington, DC 20024-2188
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<http://www.greenjournal.org>

Editor Queries

1. General: The Editor has made edits to the manuscript using track changes. Please review them to make sure they are correct.

2. Page 4, Line 5: This is an important point. In your revisions, you note that the patient's fundus was firm and well contracted—apparently not atonic. Some might argue that the Balloon was contraindicated and that perhaps placing a balloon in a well-contracted uterus would be a scenario in which this complication may occur. Please comment in discussion section of paper. In your background section of your paper you make the case for using these balloons when placental site bleeding is suspected and you may wish to add that here as well.

- We have added lines 11-19, page 10 to address this comment in the discussion as well in the introduction (line 8-12, page 6). In the original description of intrauterine balloon tamponade, Bakri described four of six patients with a history of placenta previa in which the balloon was placed for placental site bleeding. Additionally, balloon tamponade devices may be used with B-lynch compression sutures which although would be physiologically different, it would also create compression similar to a contracted uterus.

3. Page 7, Line 3: Do you mean at the end of the cesarean? Given that large blood loss at that time, did you transfuse her? 2.5 liter loss at our place would have called for initiation of massive transfusion protocol.

- Yes, we do mean estimated blood loss (EBL) of 2.5L at the end of the cesarean. Changes have been made to make that more clear. She did not receive a blood transfusion while in the OR for the cesarean delivery but shortly after in the recovery room. Changes have been made to more accurately state that the massive transfusion protocol was initiated earlier in the time course than how it was stated previously.

4. Page 8, Line 9: So far I count up to another 2.50 liters of so of blood loss—total so far is 5 liters. Could you please provide a summative tally as you go along for the post-operative losses:

EBL in recovery room prior to Bakri placement

EBL in first 4 hours post-Bakri placement

EBL when the Bakri came out

TOTAL EBL from Cesarean delivery plus immediate post-operative period prior to return to OR.

- EBL has been added throughout her postoperative course in a summative tally.

5. Page 9, Line 12: Traditional teaching, as you note earlier, is use of the balloon for atony, PPH from medical bleeding or surgical bleeding (lacerations) aren't typically settings where first line measure is tamponade.

- Changes have been made that balloon tamponade can be considered in refractory hemorrhage due to atony or if hemorrhage is due to other sources such as placental site bleeding. Additionally, in both the introduction and discussion, we commented that Bakri originally described the use of intrauterine balloon tamponade in patients with ongoing placental site bleeding.

6. Page 9, Line 22: Could its placement in a well contracted uterus be a risk factor? Given that you placed it in a well contracted uterus, your indication was apparently for placental site hemorrhage and you make the case for this in the introduction (although that could be beefed up a bit). Perhaps an important teaching point to consider—if you agree with it of course—is that when used in a well contracted uterus, the risk of uterine perforation at placement of with increasing intrauterine pressure may be risk factors and one should be alert to this possibility?

- We agree that this is a good teaching point and something one should be alert of this possibility when placing an intrauterine balloon tamponade device in a well contracted uterus. (page 10, line 11-19). We

have edited our teaching points to include this. As stated above, we also have included that placental site hemorrhage could be an indication for balloon placement in both the introduction and discussion.

7. Page 9, Line 23: Is there any evidence that a contracted myometrium is less strong than a closed CS incision?

- From our research, we were unable to find clear evidence that the contracted myometrium is less strong than a closed Cesarean incision. This was our hypothesis as to why the rupture occurred at a location completely separate from the sutured Cesarean incision.

From: [REDACTED]
To: [Stephanie Casway](#)
Subject: Re: O&G Art Revision: 18-1226
Date: Wednesday, September 5, 2018 9:40:34 PM

Hello Ms. Casway,

Thank you for your email. I have reviewed the figure and legend and it is correct. I do not have any changes to either at this time. Have a nice day.

Sincerely,
Kim

From: Stephanie Casway <SCasway@greenjournal.org>
Sent: Wednesday, September 5, 2018 6:28 AM
To: Kim Thuy Nguyen
Subject: O&G Art Revision: 18-1226

Good Morning Dr. Nguyen,

Your figure has been edited, and PDFs of the figure and legend are attached for your review. Please review the figure and legend CAREFULLY for any mistakes.

PLEASE NOTE: Any changes to the figures must be made now. Changes made at later stages are expensive and time-consuming and may result in the delay of your article's publication.

To avoid a delay, I would be grateful to receive a reply no later than Friday, 9/7. Thank you for your help.

Best wishes,

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