

Submission ID #: 70333

Scriptwriter Name: Poornima G

Project Page Link: <https://review.jove.com/account/file-uploader?src=21451613>

Title: Removal of an Intravesical Gellhorn Pessary and Staged Repair of a Residual Large Vesico-Vaginal Fistula

Authors and Affiliations:

Zoe Bass, Christine Herforth, Paige Kuhlmann, Philippe Zimmern

University of Texas Southwestern Medical Center

Corresponding Authors:

Philippe Zimmern Philippe.Zimmern@utsouthwestern.edu

Email Addresses for All Authors:

Zoe Bass	Zoe.bass@utsouthwestern.edu
Christine Herforth	Christine.m.herforth.mil@health.mil
Paige Kuhlmann	Paige.Kuhlmann@cshs.org
Philippe Zimmern	Philippe.Zimmern@utsouthwestern.edu

Author Questionnaire

1. Software: Does the part of your protocol being filmed include step-by-step descriptions of software usage? **No**

1. We have marked your project as author-provided footage, meaning you film the video yourself and provide JoVE with the footage to edit. JoVE will not send the videographer. Please confirm that this is correct.

✓ Correct

2. Interview statements: Which interview statement filming option is the most appropriate for your group? **Please select one.**



Interview VO generated by JoVE

3. Proposed interview filming date: Please indicate the proposed date that your group will self-film interviews: **06/01/2026**

When you are ready to submit your video files, please contact our Content Manager, [Utkarsh Khare](#).

Current Protocol Length

Number of Steps: 08

Number of Shots: 16

Interviews

NOTE to VO producer: Please generate VO for interviews

Authors: Please note that **the questions will not appear on screen**. Please answer in **stand-alone full sentence with sufficient context**.

INTRODUCTION:

~~REQUIRED: Briefly describe the clinical case presented in this video and the treatment approach used.~~

- 1.1. A 79-year-old woman with an intravesical Gellhorn pessary and vesicovaginal fistula underwent transvaginal pessary removal followed by staged Latzko colpopoiesis repair.

1.1.1. *B-roll: 2.3.1*

~~Explain why this treatment approach was selected for this particular case.~~

- 1.2. Chronic inflammation, a large apical fistula, and sexual inactivity favored staged transvaginal extraction and Latzko colpopoiesis over more invasive abdominal approaches.

1.2.1. *B-roll: 2.5.1*

CONCLUSION:

~~Describe any important challenges or complications encountered during treatment and how they were managed~~

- 1.3. Challenges during the treatment included the pessary resisting cutting and obscured anatomy; guidewire-assisted traction enabled transvaginal extraction, and delayed repair allowed inflammation to resolve before definitive closure.

1.3.1. *B-roll: 2.7.1*

~~Summarize the key clinical lessons or takeaways from this case for other clinicians~~

- 1.4. The key takeaway from this study is that guidewire-assisted transvaginal extraction and staged Latzko repair offer a reproducible, minimally invasive option for selected intravesical pessary cases.

1.4.1. *B-roll: 3.1.2*

~~Describe how the patient's condition has progressed following treatment.~~

- 1.5. The patient recovered well, and long-term follow-up showed fistula closure, complete bladder emptying, resolution of urinary leakage and recurrent infections, and successful catheter removal.

1.5.1. B-roll: 3.3.2

Ethics Title Card

This research has been approved by the UT Southwestern Medical Center Human Research Ethics Committee

Protocol

Title Card

Preoperative Preparation and Initial Exposure

- General anesthesia and monitoring were established.
- The patient was positioned in low lithotomy with thrombosis prophylaxis.
- Sterile abdominal and perineal preparation was performed.
- Cystoscopic, laser, and electrocautery instruments were prepared.
- Vaginal exposure identified the vesicovaginal fistula.

2. Guidewire-Assisted Transvaginal Extraction of the Intravesical Gellhorn Pessary

2.1. After exposing the vaginal area, a cystoscope was inserted transurethrally to evaluate the bladder [1]. The bladder neck and left ureteric orifice were identified [2], while the right ureteric orifice could not be identified due to an inflammatory reaction [3].

2.1.1. LAB MEDIA: pessary_vid 00:50-00:52

2.1.2. LAB MEDIA: pessary_vid 02:45 – 02:55

2.1.3. LAB MEDIA: pessary_vid 02:55 – 03:05

2.2. The Gellhorn pessary was confirmed to occupy the majority of the bladder lumen [1], and inflammatory changes of the bladder wall were documented [2].

2.2.1. LAB MEDIA: pessary_vid 03:15 – 03:30

2.2.2. LAB MEDIA: pessary_vid 03:40 – 03:50

2.3. Then, a 5-French open-ended ureteral catheter was inserted through a lateral drainage port of the pessary [1] and was advanced further [2].

2.3.1. LAB MEDIA: pessary_vid 13:20 – 13:32

2.3.2. LAB MEDIA: pessary_vid 13:36 – 13:42

2.4. The intravesical end of the wire was retrieved above the pessary using cystoscopic grasping forceps [1], and the wire was exteriorized through the urethra [2].

2.4.1. LAB MEDIA: pessary_vid 19:05 – 19:15

2.4.2. LAB MEDIA: pessary_vid 19:16 – 19:20

2.5. Controlled traction was applied to both ends of the guidewire [1], and a lateral tilting of the pessary was observed within the bladder [2].

2.5.1. LAB MEDIA: pessary_vid 34:50 – 35:00

2.5.2. LAB MEDIA: pessary_vid 35:00 – 35:12 **Author's NOTE: Lateral tilt is difficult to visualize; this is the extent of the video available.**

2.6. After grasping the pessary, it was folded along its axis to reduce its transverse diameter [1], and gradual traction was applied through the vesicovaginal fistula tract until the pessary was delivered completely through the vagina [2].

2.6.1. LAB MEDIA: pessary_vid 40:44 – 40:48

2.6.2. LAB MEDIA: pessary_vid 40:49 – 40:55

2.7. Cystoscopy was repeated through the urethra and fistula tract to evaluate the bladder [1].

2.7.1. LAB MEDIA: pessary_vid 41:20 – 41:30

2.8. Finally, adherent debris was removed from the bladder wall using grasping forceps to reduce the risk of future calculus formation [1].

2.8.1. LAB MEDIA: pessary_vid 43:00 – 43:05

Title Card

Following pessary removal, staged Latzko colpocleisis was performed for definitive vesicovaginal fistula repair.

Results

3. Results

3.1. Computed tomography imaging showed [1] a Gellhorn pessary within the bladder lumen in coronal [2] and sagittal views [3] in a 79-year-old woman who had been treated with the pessary for pelvic organ prolapse 3 years earlier [4].

3.1.1. LAB MEDIA: Figure 1

3.1.2. LAB MEDIA: Figure 1A. *Video editor: Highlight the bright T-shaped pessary inside the bladder area towards the bottom of the image.*

3.1.3. LAB MEDIA: Figure 1B. *Video editor: Highlight the bright T shaped pessary in the side-view image towards the bottom.*

3.1.4. LAB MEDIA: Figure 1

3.2. Post-operative sagittal T2-weighted MRI obtained 80 days after pessary removal showed a persistent vesicovaginal fistula extending between the bladder and the upper third of the vagina [1].

3.2.1. LAB MEDIA: Figure 2. *Video editor: Highlight the red box marking the fistula tract between the bladder and vagina.*

3.3. The fistula was subsequently repaired, and colpocleisis was performed [1]. A follow-up voiding cystourethrogram after 4 weeks confirmed closure of the fistula [2].

3.3.1. LAB MEDIA: Figure 3

3.3.2. LAB MEDIA: Figure 3. *Video editor: Highlight the area labeled "Healed Fistula Tract."*

1. Intravesical

Pronunciation link: https://www.merriam-webster.com/dictionary/intravesical

IPA: /ˌɪn.trəˈves.ɪ.kəl/

Phonetic Spelling: in·truh·VES·ih·kuhl

2. Gellhorn

Pronunciation link:
<https://www.howtopronounce.com/gellhorn>
IPA: /'gel.hɔ:rn/
Phonetic Spelling: GEL·horn

3. Pessary

Pronunciation link: <https://www.merriam-webster.com/dictionary/pessary>
IPA: /'pes.ə.ri/
Phonetic Spelling: PES·uh·ree

4. Vesicovaginal

Pronunciation link: <https://www.merriam-webster.com/medical/vesicovaginal>
IPA: /,ves.ɪ.koʊ'vædʒ.ə.nəl/
Phonetic Spelling: VES·ih·koh·VAJ·uh·nuhl

5. Fistula

Pronunciation link: <https://www.merriam-webster.com/dictionary/fistula>
IPA: /'fɪs.tʃə.lə/
Phonetic Spelling: FISS·chuh·luh

6. Transvaginal

Pronunciation link: <https://www.merriam-webster.com/medical/transvaginal>
IPA: /,trænz'vædʒ.ə.nəl/
Phonetic Spelling: tranz·VAJ·uh·nuhl

7. Latzko

Pronunciation link:
<https://www.howtopronounce.com/latzko>
IPA: /'lɑ:t.skʊ/
Phonetic Spelling: LAHTS·koh

8. Colpocleisis

Pronunciation link:
<https://www.howtopronounce.com/colpocleisis>
IPA: /,kɒl.pʊʊ'klaɪ.sɪs/
Phonetic Spelling: kol·poh·KLYE·suhs

9. Apical

Pronunciation link: <https://www.merriam-webster.com/dictionary/apical>
IPA: /'æp.ɪ.kəl/
Phonetic Spelling: AP·ih·kuhl

10. Invasive

Pronunciation link: <https://www.merriam-webster.com/dictionary/invasive>
IPA: /ɪn'veɪ.sɪv/
Phonetic Spelling: in·VAY·siv

11. Inflammation

Pronunciation link: <https://www.merriam-webster.com/dictionary/inflammation>
IPA: /,ɪn.flə'meɪ.ʃən/
Phonetic Spelling: in·fluh·MAY·shuhn

12. Anatomy

Pronunciation link: https://www.merriam-webster.com/dictionary/anatomy

IPA: /əˈnæt.ə.mi/

Phonetic Spelling: uh·NAT·uh·mee

13. Guidewire

Pronunciation link: https://www.merriam-webster.com/medical/guidewire

IPA: /ˈgaɪdˌwaɪr/

Phonetic Spelling: GYDE·wyre

14. Extraction

Pronunciation link: https://www.merriam-webster.com/dictionary/extraction

IPA: /ɪkˈstræk.ʃən/

Phonetic Spelling: ik·STRAK·shuhn

15. Reproducible

Pronunciation link: https://www.merriam-webster.com/dictionary/reproducible

IPA: /ˌriː.prəˈduː.sə.bəl/

Phonetic Spelling: ree·pruh·DOO·suh·buhl

16. Minimally

Pronunciation link: https://www.merriam-webster.com/dictionary/minimally

IPA: /ˈmɪn.ə.mə.li/

Phonetic Spelling: MIN·uh·muh·lee

17. Computed

Pronunciation link: https://www.merriam-webster.com/dictionary/computed

IPA: /kəm'pju:tɪd/

Phonetic Spelling: kuhm·PYOO·tid

18. Ureteral

Pronunciation link: https://www.merriam-webster.com/medical/ureteral

IPA: /jʊ'reɪ.tə.rəl/

Phonetic Spelling: yoo-REE·tuh·ruhl

19. Cystoscopy

Pronunciation link: https://www.merriam-webster.com/medical/cystoscopy

IPA: /sɪ'stɒs.kə.pi/

Phonetic Spelling: sis-TOS·kuh·pee

20. Cystourethrogram

Pronunciation link: https://www.merriam-webster.com/medical/cystourethrogram

IPA: /ˌsɪs.toʊ.jʊ'reɪ.θrə.græm/

Phonetic Spelling: sis-toh·yoo-REE·thruh·gram