ISSN: 3029-0910

Case Report

Journal of Gynecological & Obstetrical Research

Cervical Recanalization in the Setting of Complete Cervical Stenosis with Hematometra, a Case Report

Tamara Lalovic[1*], Rahul Yerrabelli[2] and Angel Marquez[3]

[1]*Obstetrics and Gynecology, Tower Health Reading Hospital, West Reading, USA*

[2]*Department of Obstetrics & Gynecology, Reading Hospital, Reading, Pennsylvania, United States of America*

[3]*Obstetrician-Gynecologist Practicing in West Reading, PA*

Corresponding author

Tamara Lalovic, Obstetrics and Gynecology, Tower Health Reading Hospital, West Reading, USA.

Received: May 08, 2025; **Accepted:** May 13, 2025; **Published:** May 20, 2025

ABSTRACT

When counseling patients prior to a cold knife cone biopsy, one of the frequent side effects that patients are made aware of is cervical stenosis. Cervical stenosis can impact women at the time of childbirth but also every month during menses. Hematometra, or the accumulation of blood within the uterus, can occur due to cervical stenosis which may present as amenorrhea and pelvic pain. There is no official guideline on how to treat hematometra associated with cervical stenosis or how to recanalize a stenotic cervix. This case report presents a 34-year-old woman with significant cervical stenosis and hematometra after a cervical conization procedure. The cervical canal was successfully entered using a spinal needle under ultrasound guidance. The cervix was then able to be dilated using lacrimal and Pratt dilators. The patient was discharged with a 14Fr Foley catheter, placed within the cervical canal, and maintained for three weeks. Cervical recanalization was confirmed at the time of foley catheter removal.

Manuscript

Cold Knife Cone biopsies are frequently performed in the obstetrical setting to aid with further investigating abnormalities identified at the time of pap smears. One of the risk factors for cervical conization is complete cervical stenosis. Though rare, occurring only at 1% of all conizations, cervical stenosis can lead to further complications such as severe pelvic pain and hematometra formation [1]. There are currently no set guidelines regarding treatment for cervical stenosis associated hematometra, but studies show providers have engineered various new and innovative ways to treat this complication.

This case report presents a 34-year-old patient with significant cervical stenosis and hematometra following a cold knife cone biopsy for cervical intraepithelial neoplasia (CIN) 3. Pathology resulted with high grade squamous intraepithelial neoplasia / CIN-3 with endocervical and ectocervical margins negative for HSIL. Approximately 10 weeks after her cold knife cone biopsy she presented to the emergency department for pelvic pain and amenorrhea. In the ED she had a transvaginal ultrasound performed which showed a moderate amount of material within the endometrial canal, likely representing blood products. A follow up CT Abdomen and Pelvis showed similar findings. The patient was taken to the operating room three days after ER presentation for attempted dilation, curettage, and hysteroscopy with the assistance of intraoperative ultrasound. Intraoperative findings included a significantly shortened cervix, flush to the posterior vaginal canal. The cervical os was extremely stenotic and unable to be visualized or dilated with Pratt dilators, lacrimal dilators, nor hydrodistension. The case was discontinued due to high concern for perforation of uterus and vaginal tissue with a fluid deficit of 2500cc. The patient returned to the operating room the next day and underwent a diagnostic laparoscopy with attempted cervical dilation. Again, providers were unable to identify the cervical canal or enter the uterine cavity. On diagnostic laparoscopy, the posterior cul-desac presented with two defects to the right of the uterosacral ligament, concerning for previous perforation. Even with ultrasound imaging and laparoscopy, multiple false passages were again formed on attempt at cervical dilation. The procedure was again aborted. Numerous discussions were had with the patient surrounding possible need for a hysterectomy due to the hematometra

Citation: Tamara Lalovic, Rahul Yerrabelli, Angel Marquez. Cervical Recanalization in the Setting of Complete Cervical Stenosis with Hematometra, a Case Report. J Gyneco Obstet Res. 2025. 3(2): 1-2. DOI: doi.org/10.61440/JGOR.2025.v3.31

and pain it was causing. The patient had a strong desire for fertility preservation. She was educated on the risks of retained hematometra, pelvic infection, pelvic pain, and endometriosis should the hematometra not be drained. The decision was made to proceed to the operating room a third time and attempt again to enter the cervical canal and uterine cavity. She underwent dilation and hysteroscopy with possible laparoscopic assistance and ultrasound guidance. With assistance of transabdominal ultrasound, a spinal needle was guided through the cervix into the uterine cavity. After successful entry, scant dark thick brown uterine contents were suctioned out using a syringe. The spinal needle was removed, and lacrimal dilators were used to progressively dilate the cervix. Copious amounts of hematometra were seen coming from the uterine cavity. The cervix was then dilated using Pratt dilators up to Pratt dilator 19. To maintain integrity of the cervical canal, a 14Fr foley was placed through the cervical os into the uterine cavity. 10cc Normal Saline was injected into the foley bulb and the foley catheter was confirmed to be in place. The patient was placed on Amoxicillin-Clavulanate 875-125mg twice daily for 7 days. The patient had the foley catheter removed three weeks after insertion. She declined any complications from foley placement. Her exam at the time of removal demonstrated successful recanalization of the cervical canal.

This case showcases an excellent and innovative way to enter a stenotic cervix, evacuate hematometra, and ensure recanalization of the cervix. There are numerous studies documenting appropriate timing and the type of procedure used to recanalize the cervix. Upon literature review, there were minimal articles regarding this topic. However, every study highlighted a unique approach to this complication. One study opened the cervical canal with an electrosurgical knife. The patient was then required to return twice a week for mechanical cervical dilation using an osmotic dilator for prevention of reoccurrence [1].

While this method has a good likelihood of success, it requires more outpatient visits and is more invasive. Another study drained the hematometra by inserting a transvaginal sonogram and introducing a needle with a guidewire through the cervix. Cervical dilation was then subsequently performed. No documentation of what was used to maintain canalization was found but the study suggested various ways in which post-procedural recurrences can be alleviated. This included using catheters, pessaries, and stents to preserve cervical patency [2]. Using 25mcg Misoprostol preoperatively followed by a lacrimal probe under ultrasound guidance was another documented mechanism for evacuating a hematometra in a patient with a diagnosed stenotic cervix. Again, there was no documentation of what was used postoperatively to maintain recanalization was found [3]. Ying, et al described foley usage to help achieve permanent cervical recanalization after using mechanical dilators to enter the cervix, however an 8- French foley was inserted into the uterine cavity and only kept for one week. Recurrence of hematometra was diagnosed in this case report. After repeat dilation, an 18-French foley catheter was placed. This time, similar to our study, the foley catheter was kept for three weeks. Unfortunately for this patient the catheter slipped out four days after placement, so the patient was placed on hormonal medication to aid with achieving recanalization [4]. Overall, there are numerous innovative ways in which a provider can enter the uterine cavity in the setting of a stenotic cervix, drain a hematometra, and maintain cervical recanalization. This case report describes one way in which hematometra drainage and cervical recanalization was achieved.

Reference

1. Shinsuke Koyama, Masaki Kobayashi, Yusuke Tanaka, Satoshi Kubota, Ryo Nakamura, et al. Complete cervical stenosis after conization: Timing for the minimally invasive reconstructive surgery, Gynecology and Minimally Invasive Therapy. 2014. 3: 57-60.
2. Reddy EM, Agrawal M, Dewani D, Goyal N. A rare case of hematometra secondary to cervical stenosis following laparoscopic myomectomy: A case report. Medical Science. 2022. 26.
3. Rezai S, Lieberman D, Caton K, Semple S, Henderson CE. Hematometra and hematocolpos, secondary to cervical canal occlusion, a case report and review of literature. Obstet Gynecol Int J. 2017. 6: 68-70.
4. Ying WP, Hung YC. Management of Cervical Stenosis - Mechanical Dilatation Adjunct with Hormonal Therapy. Obstet Gynecol Cases Rev. 2023. 10: 235.