

Cystoscopy Coagulation of Vesicovaginal Fistula. A Case Report and Mini Review of the Literature.

Chrisostomos Sofoudis ^{1*}, and Panagiotis Filios ².

¹ Department of Obstetrics and Gynecology, Konstandopoulou General Hospital Athens, Greece.

² Department of Urology, Konstandopoulou General Hospital Athens, Greece.

*Corresponding Author: Chrisostomos Sofoudis, Department of Obstetrics and Gynecology, Konstandopoulou General Hospital Athens, Greece.

Received date: March 02, 2021; Accepted date: March 08, 2021; Published date: March 12, 2021.

Citation: Chrisostomos Sofoudis, and Panagiotis Filios, Cystoscopy Coagulation of Vesicovaginal Fistula. A Case Report and Mini Review of the Literature, J. New Medical Innovations and Research, 2(2): DOI: [10.31579/jnmir.2021/009](https://doi.org/10.31579/jnmir.2021/009).

Copyright: © 2021 Chrisostomos Sofoudis. This is an open-access article distributed under the terms of The Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Myomas represent the most common benign type of female genital track. Therapeutic mapping is strongly associated with age of the patient, number and location of the myomas and patient's reproductive capacity.

Among the future operative and postoperative complications consist communication of vaginal wall with local organs, formation of a fistula. Adjunction and further anatomic penetration between vaginal wall and urine bladder epithelium, can depict a vesicovaginal fistula. After proper diagnosis, therapeutic mapping depends on the type of the fistula and surgical intervention in order to ensure patient's quality of life.

Aim of our study, consists proper diagnosis and conservative management of vesicovaginal fistula. Cystoscopy therapeutic strategy with proper follow up represents an alternative treatment of choice, avoiding compound surgical interventions.

Key words: cystoscopy, vesicovaginal fistula, urine bladder, vaginal wall, hysterectomy, postoperative pain, vaginal bleeding, abdominal pain

Introduction

According to recent current bibliography, total or subtotal hysterectomy, classically or laparoscopically, is strongly associated with operative or postoperative complications [1]. This surgical procedure depends on the body mass index of the patient, size or stage of the lesion and finally, on the surgical steps of the operation. Among postoperative pain, vaginal bleeding, fever there is always a possibility of vesicovaginal fistula depiction [2].

Morphologically, there is an anatomic communication between vesical and vaginal wall with dominant feeling the loss of urine amount through vaginal wall. Principles of abdominal vesicovaginal fistula (VVF) repair include good exposure of the fistulous tract, double-layer bladder closure, and retrograde fill of the bladder to ensure a water-tight seal, tension-free closure and continuous postoperative bladder drainage [3].

Fortunately, in some cases therapeutic mapping can be more conservative, avoiding all these useful but surgical interventions. Our case is being demonstrated, in order to justify our therapeutic strategy. Proper diagnosis and assiduous treatment can consist useful tools concerning always the quality of life of the patient. Cystoscopy coagulation of uterine wall loss can be capable and effective, consisting a conservative method of such postoperative complications [4]. Other therapeutic interventions can be robotic assisted endoscopic closure, laser endoscopic assisted procedure or endoscopic assisted use of fibrin glue or bovine collagen [5].

All these techniques are strongly associated with capabilities of each hospital and the appropriate medical equipment such as endoscopic urologic devices. Despite our many difficulties, postoperative outcome had an enormous success.

Case History

We present a 65-year-old female patient (P2, G2) admitted at our Department complaining of diffuse abdominal pain. Pap smear revealed no signs of malignancy. Transvaginal ultrasound depicted severe enlargement of endometrial density. (Maximal diameter 17 mm) abdominal MRI confirmed all preoperative imaging findings.

Patient underwent diagnostic curettage in order to exclude any malignant anatomic areas. Final histologic examination did not reveal signs of malignancy. Follow up of the patient, consisted transvaginal surveillance every three months. Due to constantly enlarged endometrial density, patient underwent diagnostic curettage without suspected histologic metaplasia.

After one year, patient underwent total abdominal hysterectomy with bilateral salpingoopherectomy. Final histologic evaluation confirmed all previous operative imaging findings. Patient discharged from hospital in 5th pod in good clinical condition. During second postoperative week, she complained of urine loss in cases of increased intra-abdominal pressure. Cystoscopy revealed anatomic deficit maximal diameter 1,5 cm in the dorsal vesical wall (Figure I.).



Figure I. Cystoscopic depiction of vesicovaginal fistula. Postoperative week.

Assiduous Cystoscopy coagulation completed successfully transformation of the pathologic area into fibrous connective tissue (Figure II.).



Figure II. Cystoscopic depiction of vesicovaginal fistula. One month later.

Patient preserved for duration of three months the urine catheter, in order to keep the area untouched by microbial infection. Final cystoscopy

revealed regeneration of vesical epithelial tissue and proper therapeutic mapping of this postoperative complication. (Figure III.)

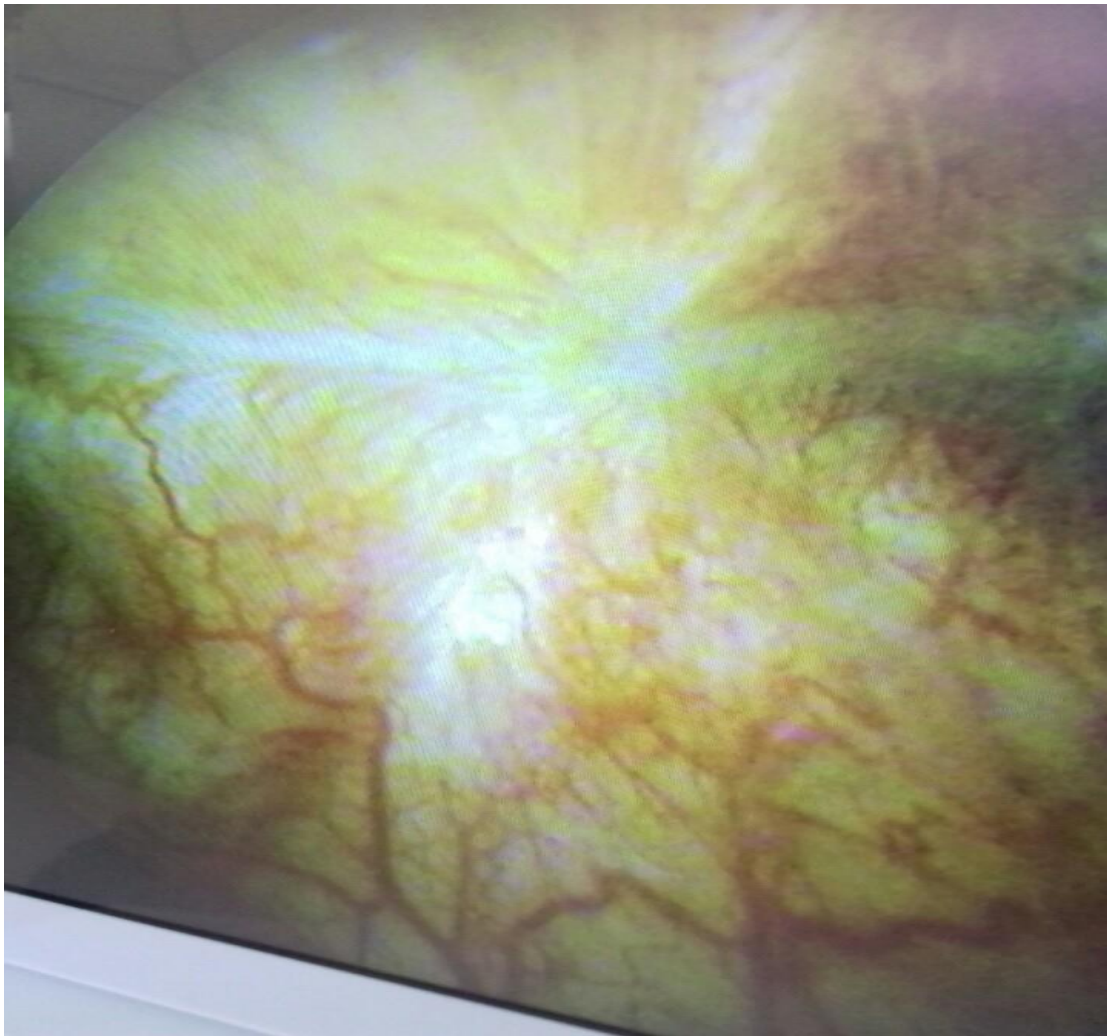


Figure III. Cystoscopic depiction of vesicovaginal fistula. Three months later.

Discussion

Vesicovaginal fistula represents the most commonly encountered sequela of genitourinary trauma [6]. The etiology and most of all the pathophysiologic mechanism remains controversial. Therapeutic mapping depends on the anatomic deficit in the vesical wall, the clinical status of the patient and strictly the surgeon's experience.

Minimally invasive techniques with laparoscopy and robotic technology are generating wider interest with reduced postoperative morbidity, but a transvaginal technique should be in the arsenal of all pelvic reconstructive surgeons. More clinical data are mandatory and clinical studies must be conducted in order to establish an assiduous and proper treatment.

Early marriage and child bearing, poor socioeconomic status, low literacy rate, malnourishment, and inadequately developed infrastructure for antenatal care and emergency obstetric services are important factors for this high prevalence in these nations.¹⁰

Many predispositional factors can increase the prevalence of Vesicovaginal fistula especially in African or Arab counties [7]. Early marriage and child bearing, poor socioeconomic status, low literacy rate,

malnourishment, inadequately developed infrastructure for antenatal care and emergency obstetric services.

In our study, cystoscopic coagulation of small anatomic deficits in vesical wall can lead to successful conservative treatment. Transformation into connective tissue through covering with antimicrobial agents and essential bladder drainage via urethral catheter consists optimal therapeutic strategy. (Median bladder catheterization 3-4 weeks). Anticholinergic drugs in cases of bladder spasms [8]. Constant follow up of the patient is mandatory in order to avoid possible postoperative complications.

Conclusion

Vesicovaginal fistula represents a common postoperative complication among gynecologic procedures. In many cases it depends on the size and the anatomic location inside the vesical wall. Assiduous diagnosis and therapeutic strategy, can led to conservative treatment such our case. Ultimate goal consists the quality of life of the patient.

Disclosure of interest

All authors declare any financial interest with respect to this manuscript.

References

1. Ramdhan RC, Loukas M, Tubbs RS (2017). Anatomical complications of hysterectomy. A review. *Clin Anat*; 30(7):946-952.
2. Hadley HR (2002). Vesicovaginal fistula. *Curr Urol Rep*; 3(5):401-407.
3. McKay E, Watts K, Abraham N (2019). Abdominal approach to vesicovaginal fistula. *Urol Clin North Am*; 46(1):135-146.
4. Hyman RM (1965). Coagulation therapy for small vesicovaginal fistulas. *Clin Obstet Gynecol. Jun*; 17:465-471.
5. Machen GL, Chiles LR, Joyce J, Wagner KR (2017). Robotic repair of vesicovaginal fistulas using fibrin sealant. *Can J Urol*; 24(2):8740-8743.
6. Lee D, Zimmern P (2019). Vaginal approach to Vesicovaginal fistula. *Urol Clin North Am*;46(1):123-133.
7. Muhammad A M, Muhammad S, Muhammad TB M, Nauman K, Adeen A (2018). Changing trends in the etiology and management of vesicovaginal fistula. *Int J Urol*; 25(1):25-29.
8. Stamatakos M, Sargedi C, Stasinou S , Kontzoglou K (2014). Vesicovaginal fistula. Diagnosis and management. *Indian J Surg*; 76 (2):131-136.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here: [Submit Manuscript](#)

DOI: [10.31579/jnmir.2021/009](https://doi.org/10.31579/jnmir.2021/009)

Ready to submit your research? Choose Auctores and benefit from:

- ❖ fast, convenient online submission
- ❖ rigorous peer review by experienced research in your field
- ❖ rapid publication on acceptance
- ❖ authors retain copyrights
- ❖ unique DOI for all articles
- ❖ immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more www.auctoresonline.org/journals/new-medical-innovations-and-research