



ENDOSKOPIK YÖNTEMLERLE TEDAVİ EDİLEN VAZİKO-VAJİNAL FİSTÜL VE VAJİNOSKOPİNİN ÖNEMİ

ENDOSCOPICALLY TREATED VESICO-VAGINAL FISTULA AND THE IMPORTANCE OF VAGINOSCOPY

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The fear of failure in repairing vesico-vaginal fistulae was and still makes this procedure a challenge for the urologist and gynecologist. Various procedures have been described since J.M. Sims first described his successful closure of a vesico-vaginal fistula in 1852 (the surgery was performed in 1849) (1).

Some of small vesico-vaginal fistulae may be treated conservatively by continuous catheter drainage of the bladder during 2-4 weeks with the hope that the laceration that caused the fistula will heal on its own. Another mode of conservative treatment of very small fistulas is by electrocoagulating the tract both from the bladder and the vagina (2). Fistulas more than 1-1.5 cm. should be repaired surgically. The timing of surgical repair is still controversial (3). Some prefer an early closure and some prefer late closure, after the blood supply of the surrounding tissues become adequate and infection subsides. This waiting period may mean 3 to 6 months. During this long time the patients are most unhappy by their wetness or they have to be put on indwelling catheter, with all its inconveniences.

The case we had the opportunity to treat and follow for a year and a half may cause some changes of concept in our conservative primary treatment of post-surgical vesico-vaginal fistulae.

CASE

A 43 years old woman passed a total abdominal hysterectomy and right salpingo-oophorectomy for uncontrollable vaginal bleedings and discharged the eight postopera-

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tive day without any complication. The 16th postoperative day she started to feel a slight wetness that became an incontinence in four days and returned to the hospital. Methylene Blue test confirmed that she developed a vesico-vaginal fistula. An indwelling catheter was left for 25 days but immediately after its removal she became wet again. The next day she was examined by the urologist author of this report that found a supratrigonal fistula of 0.5-0.7 cm. and two submucosal chromic catgut stiches (46 days after surgery). These stiches were removed using the grasping forceps of the cystoscope (Fig 1). After removing the cystoscope from the bladder a vaginoscopy was performed and the remnants of the chromic catgut sutures of the vaginal closure were seen between lumps of oedematous tissues (Fig. 2). Methylene Blue was injected through a catheter into the bladder and the fistula was seen between the sutures. These sutures also were removed with the grasping forceps and a Foley catheter was left indwelling for 6 days. A repeated Methylene Blue test after the removal of the catheter did not show a leakage into the vagina and the patient was left without a catheter, fully controlling her urine for another 3 days and then discharged. A year and a half later she is fully continent with sterile urine.



Fig 1. Cystoscopic view of the fistula and the submucosal sutures



Fig. 2: Vaginoscopic view of the suture material remnants in the vaginal cul-de-sac

DISCUSSION

Most post-gynecologic-surgery vesico-vaginal fistulae develop due to tissue anoxia of a part of the neighboring vesico-vaginal walls. This happens during the blunt separation of the bladder from the uterus using a gauze sponge, stripping the tissues from their blood supply. A similar cause for tissue anoxia may develop during the closure of the vagina. Sutures can accidentally pass through the bladder and disrupt the blood supply in a part of the vesico-vaginal walls causing tissue necrosis, as in our case. When the fistula is caused by a penetrating surgical injury it presents during surgery or immediately after the surgical procedure by wetness. When the cause is a lacerating injury or anoxia caused by sutures it may present after a few "dry" postoperative days, until the devitalised tissues necrotize and the fistula develops.

Cystoscopic examination of the fistula is mandatory before any surgical procedure in order to localize it and plan the surgical strategy. To this examination we added

a routine vaginoscopy, simply by inserting a cystoscope into the vagina and examine its anterior wall and the anterior and lateral fornixes or the cul-de-sac, if the patient passed a hysterectomy. The vaginoscopy is performed under continuous flow of the irrigating solution. Concomitantly a non-diluted Methylene Blue solution is injected into the bladder through a catheter. The blue colour coming from the fistula can be seen clearly, easing the localisation of the fistula even if it is between the vaginal plicas or oedematous tissues. The detailed view we get during vaginoscopy is much clearer than during simple speculum examination of the vagina, even if the area is well illuminated. This can be compared to the endoscopic and open examination of the bladder where during endoscopy even small details can be seen in the bladder.

Our case showed us some important points:

1- The cause of the iatrogenic injury was sutures passing from both the vaginal and bladder walls, causing tissue necrosis and not laceration during dissection. This cause should be added to the etiopathology of vesico-vaginal fistulae.

2- The resorption of catgut sutures is highly variable. Chromic catgut sutures are expected to be absorbed in about 3 weeks. In our case they were not absorbed even in 6.5 weeks.

3- After a 3 week continuous catheterisation if the fistula does not heal, a cystoscopy and vaginoscopy is mandatory. Remaining suture material should be removed during this endoscopic examination, especially when the fistula is detected between the sutures. Three weeks is enough time for a secure closure of the vaginal wound.

4- Our experience with this case adds a new conservative treatment of post-surgical vesico-vaginal fistulae using only endoscopic manipulations.

ÖZET

Jinekolojik bir ameliyat sonrası gelişen ve endoskopik yöntemlerle tedavi edilen bir veziko-vajinal fistül vakası takdim edilmiştir.

Varabildiğimiz literatürde buna benzer bir yöntemin kullanılışı hakkında bir yayın tesbit edemedik.

Veziko-vajinal fistüllerde vajinoskopi yapılmasının önemini vurguluyoruz.

ABSTRACT

We are presenting a case of post-surgical vesico-vaginal fistula treated by endoscopic means.

No similar mode of treatment could be found in the literature available to us.

The value of vaginoscopy is emphasized.

REFERENCES

1. **Sims, J.M.:** On the treatment of vesico-vaginal fistula. *Am. J. Med. Sci.* 23: 59-82, 1852.
2. **O'Connor, V.J., Sokol, J.K., Buckley, G.J. et al.:** Suprapubic closure of vesico-vaginal fistula. *J. Urol.* 109: 51-54, 1973.
3. **Zimmern, P.E., Hadley, H.R., Staskin, D.R., Raz, S.:** Genitourinary Fistulae. Vaginal approach for repair of vesico-vaginal fistulae. *Urol. Clin. North. Amer.* 12: 361-367, 1985.