# Nadir Bir Gerilimsiz Vajinal Tape (TVT) Komplikasyonu - Vajinal Erozyon

# A Rare Complication of Tention-free Vaginal Tape: Vaginal Erosion

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**Özet**

Gerçek üriner stres inkontinans nedeniyle gerilimsiz vajinal tape (TVT) operasyonu yapılan58 yaşında kadın hastanın post-operatif iki ay sonra başlayan disparani, post-koital kanama vetekrarlayan vajinal infeksiyonlar nedeniyle yapılan vajinal muayenesinde, üzeri granülasyondokusuyla kaplı TVT materyalinin anterior duvardan protrude olduğu gözlendi. Hastaya TVT işleminden 10 ay sonra vajinal protrude TVT materyal eksizyonu yapıldı. Post-operatif dönemde hastanın vajinal epitelinin tamamen iyileştiği ve kontinansının tam olduğu gözlendi.

**Anahtar Kelimeler:** Gerilimsiz vajinal tape, İnkontinans cerrahisi, Vajinal erezyon.

**Abstract**

A 58 year-old woman who had transvaginal tape surgery because of pure stress urinary incontinence, underwent physical examination with the disparonia, post–coital bleeding and recurrent vaginal infections. Physical examination revealed Tention-free Vaginal Tape (TVT) material was covered with granulamous lesion which was protruding from the anterior vaginal wall. Ten months after TVT procedure, the protruding material was excised. Vaginal epitel was completely healed and continence was achieved post operatively.

**Key words:** Incontinence surgery, Tention-free Vaginal Tape (TVT), Vaginal Erosion.

## Introduction

Tension free vaginal tape (TVT) surgery, introduced by Ulmstein in 1996 is a high success rate surgical technique for pure urinary stress incontinence (SUI) with low complication rates (1). Here we present a case whom underwent TVT procedure for SUI with symptoms started after 2$^{th}$ month of surgery and treated conservatively for 8 months without any relief and diagnosed as TVT protrusion with the physical examination.

## Case Report

A 58 year-old, married, labored two children, without any medical conditions and Body Mass Index (BMI) of 25.5 (height 158 cm, weight 72 kg) underwent TVT surgery in another institution. Two months after surgery, patient has the following symptoms: vaginal bleeding, disparonia, recurrent vaginal infections. Patient was interminttently treated for the symptoms. Patient admitted to our clinic 10 months after the surgery with the same symptoms. She did not have incontinence. The vaginal examination under lithotomy position revealed, tenderness in vagina and an irregular lesion covered with granulation tissue and eroded vaginal epithelium which is located on anterior vaginal wall near to the bladder and was aproximately 15 mm in diameter (Fig 1). Patient was admitted to clinic with the aforementioned symptoms, and urinary tract infection. Preoperatively informed surgical consent from was obtained from the patient. After the appropriate systemic and topical treatment for vaginitis and urinary tract infection, patient underwent cystoscopy which revealed no pathology neither in the urethra nor in the bladder.

Eroded vaginal tissue, with hyperemic granulation tissue containing the TVT material was observed on the anterior vaginal wall, 8 cm proximal to the external meatus. The protruded TVT material was excised along with bilateral paraurethral planes and urethral tissue was preserved (Figure 2 and 3). Urethral catheter held in position for 3 days and patient was ordered to abstain coitus for 8 weeks. The follow- up examination in 6th week revealed the anterior vaginal wall was completely healed. There were any complications such as incontinence, disparonia, recurrent urinary tract infections or paraurethral pain. Patient did not have any symptoms on the 6, 12 and 18 months follow-ups.

**Figure 1:** Defect on the vagina.

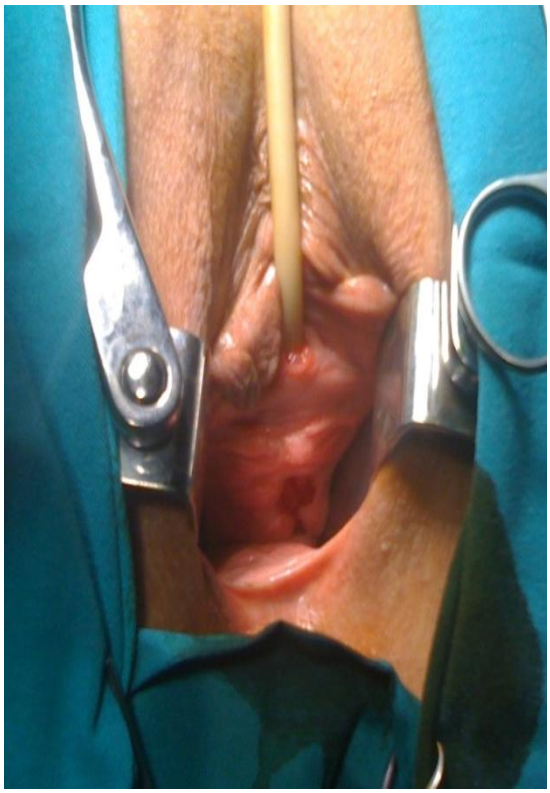


**Figure 2:** Intraoperative appearence of the vagina.

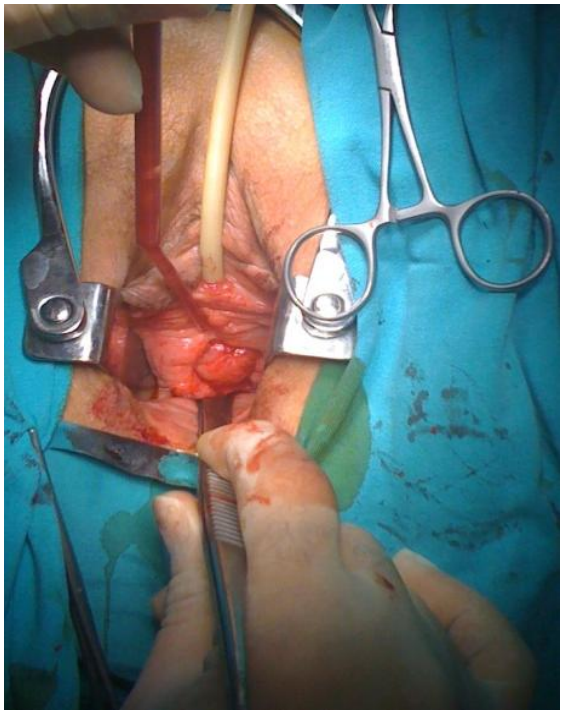
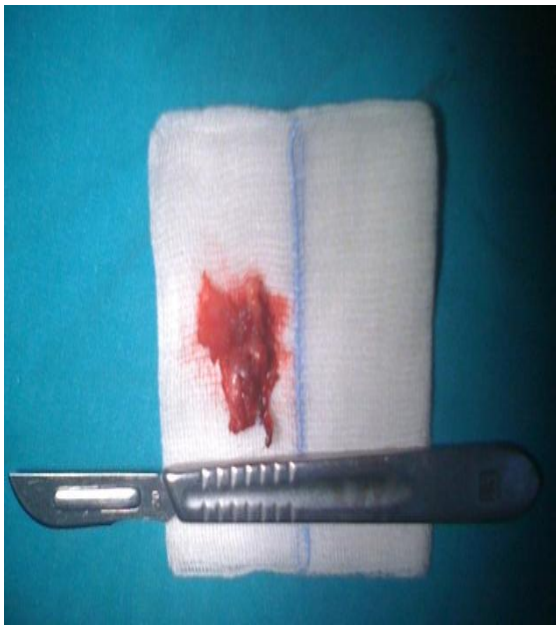


**Figure 3:** Excised tissue.



**Discussion**

More than 100 surgical techniques have been practiced for SUI up to date. Yet, a few techniques including Trans Obturator Tape (TOT) and TVT is still being used (2). 29% of middle–aged and elderly women have SUI which signifies the importance of the issue (3). Retropubic Burch suspension have a success rate of 80–90% and is accepted as the gold standart by many surgeons (4). TVT surgery, introduced by Ulmstein (1) in 1996 is getting popular around the globe, and a huge number of cases have been reported. Although its widespread use, long term results have been recently revealed. Furthermore some papers indicate that satisfaction rates of 96% of the patients (5). The technique's success has led many novel incontinence surgery techniques (TOT, mini TOT, single incision sling etc.) to be compared with the TVT in terms of complication rates, rates of success, and patient satisfaction.

The most common complications of TVT surgery are bladder perforation and urinary retention. Uncommon complications include; overactive bladder, voiding disfunction, pelvic and retropubic bleeding, and hematoma (6). Material erosion in the bladder, urethra, or vagina is a rare but serious complication.

According to the literature vaginal or urethral patch erosion rate is 0–2%, and some studies indicate an average of 11.2 months after the surgery (7,8). Although erosion cases up to 10 years after surgery have been reported, it is a rare entity after the first year post-operatively (9).

Tension free vaginal tape is a synthetic patch made of polypropilene type 1. It is still not known how this material leads to erosion after suburethral use in some patients. Many factors have been held responsible including; defective tissue healing by subclinic infections, biomechanic properties of material, diabetes mellitus, concurrent vaginal surgery (histerectomy, prolapsus surgery

etc.) previous surgery for incontinence, misplacement of the material, over tension and wound infections (8,9). Moreover surgery in obese patients has its own diffuculties in placement and determining the tension of the patch.

In the presented case the risk factors were recurrent vaginitis and misplacement of the patch as it was 8 cm proximal to the meatus. The patient did not have diabetes, her BMI was normal (25.5 $kg/m^2$) and she did not have concurrent surgery.

The only patient in the current literature who had tumor growth because of the patch material was reported by Kwon et al. (10). The 62 year-old woman who had neurofibramatosis was diagnosed with myofibroblastic tumor in 2012. In our case the pathologic analysis was reported as inflamatory granulation tissue which was benign.

In conclusion Tension free vaginal tape (TVT) is a sucessful operation in terms of rates of success and patient satisfaction. The patient (i.e. uncontrolled diabetes and urinary tract infections must be treated before surgery) and the material selection and surgeon's experience are important factors. Although the complications are rare, appropiate precautions must be taken. It must be held in mind that in one case tumor growth due to material was reported.

## Conflict of Interest

There are no conflicts of interest in our study and no financial support for this study.

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