Sigmoid Colon Vaginoplasty After Pudendal Thigh Flap, Complicated with Hairy and Tight Vagina: Case Report

Pudendal Uyluk Flebi Sonrası Oluşan Dar ve Kıllanmış Vajen İçin Sigmoid Kolon Vajinoplasti

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ABSTRACT The creation of a neovagina is necessary for females who have a congenital absence of the vagina. Various local flaps are used in creating a neovagina. We present a case of a Mayer-von Rokitansky-Kuster-Hauser syndrome (MRKHS) patient who had had a pudendal thigh flap operation but still have complaints and then the successful sigmoid vaginoplasty was performed on her. A 30-year-old woman with MRKHS, who had undergone a pudendal thigh flap operation about three years ago, was admitted to our clinic with complaints of hair and tightness in her vagina and a lack of lubrication. A sigmoid vaginoplasty was planned and succesfully performed on her. We believe that a sigmoid colon vaginoplasty should be the preferred treatment for MRKHS patients who have had a pudendal thigh flap operation but still have complaints about their condition.

Key Words: Vagina; surgical flaps; Rokitansky Kuster Hauser Syndrome; vagina, absence of

ÖZET Konjenital olarak vajeni olmayan kadınlarda neovajen yapılması gerekmektedir. Bunun için çeşitli lokal flepler kullanılmaktadır. Biz,önceden pudendal uyluk flebi ile neovajen oluşturulmasına rağmen şikayetleri devam etmesi üzerine sigmoid kolon vajinoplasti yaptığımız bir olguyu sunuyoruz. Otuz yaşında, Mayer-Von Rokitansky-Kuster-Hauser Sendromu (MRKHS) hastasına üç yıl önce pudendal uyluk flebi operasyonu ile vajen rekonstrüksiyonu uygulanmıştı. Hasta bizim kliniğimize vajende darlık, kıllanma ve kuruluk şikayeti ile başvurdu. Bu hastaya, sigmoid kolon vajinoplasti uyguladık ve başarılı olduk. Pudendal uyluk flebi ile vajina rekonstrüksiyonu uygulanıp bu işlemden tatmin olmayan MRKHS hastaları için sigmoid kolon vajinoplasti uygun yöntem olabilir.

Anahtar Kelimeler: Vajina; cerrahi flepler; Rokitansky Kuster Hauser Sendromu; vajina, yokluğu

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The rarely seen Mayer-Rokitansky-Kuster-Hauser syndrome (MRKHS) is a congenital cause of primary amenorrhoea due to uterovaginal agenesis, and it occurs in 1 out of 4.000-5.000 births.[1] The creation of a neovagina is necessary for females who have a congenital absence of the vagina. There is no single superior surgical approach, however, many surgical techniques have been defined to correct the defect. Various local flaps are used in creating a neovagina. Pudendal thigh flaps, gracilis and rectus abdominis musculocutaneous flaps, labia minora flaps, and flaps raised after tissue expansion of the labial pocket are some of the flaps used in these techniques.[2-7] In addition, most segments of the intestinal tract have been used

to create a neovagina, but the sigmoid colon is particularly useful because it is anatomically close to the perineum.

In this report we present a case of a MRKHS patient who had had a pudendal thigh flap operation but still have complaints and then the successful sigmoid vaginoplasty was performed on her.

CASE REPORT

A 30 year old woman patient with MRKHS was admitted to our clinic after she had complained of hair and tightness in her vagina and a lack of lubrication. These issues affected her sexual life and psychological health. She had undergone a pudendal thigh flap operation about three years prior to her visit to our clinic. In the pelvic examination that we conducted, the vagina was observed to be hairy and tight (Figure 1). A sigmoid vaginoplasty was planned and an informed consent form was obtained from the patient. Before the operation, bowel preparation was performed for 2 days. The operation was performed with the patient in the semilithotomy position, and she was placed under general anesthesia. A Maylard incision was made to obtain a good cosmetic result. The vascularity of the mesosigmoid was inspected by mesenteric transillumination. A 15-20 cm segment of the sigmoid colon with adequate vascularity was isolated and mobilized. The pudendal flap was dissected from the intraoitus. Isoperistaltic transfer of the sigmoid flap was performed, the proximal end was sutured by polypropylene 3-0 and it was closed. The distal end was sutured by 3-0 polyglactic acid sutures to the introital skin (Figure 2). The remaining colon segments were anastomosed end-to-end with 4-0 polyglactic acid (vicryl) sutures and the operation was completed. No intraoperative or post-operative complications were observed. The patient was evaluated post-operatively after 7 months, and she had no complaints. Her sexual activity, self-esteem and body image improved following the operation.

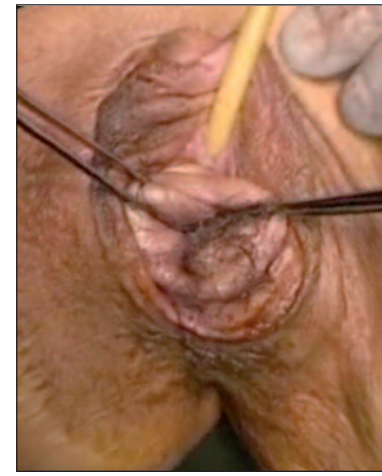

FIGURE 1: The vagina was observed to be hairy and tight as a result of pudendal thigh flap.
(See for colored form http://jinekoloji.turkiyeklinikleri.com/)

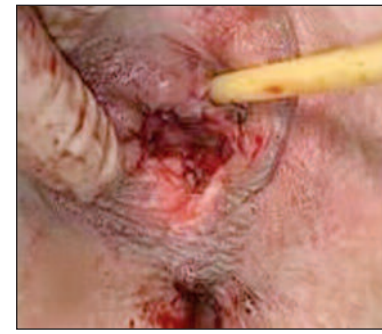

FIGURE 2: Isoperistaltic transfer of the sigmoid flap was performed. The distal end was sutured by 3-0 polyglactic acid sutures to the introital skin.
(See for colored form http://jinekoloji.turkiyeklinikleri.com/)

DISCUSSION

The optimal surgical treatment of vaginal agenesis is controversial. In the past, the most commonly used method for creating a neovagina was the split-thickness skin graft technique.[8] This method has the advantage of being a minimally invasive procedure with low morbidity. However, the long-term results of this procedure has shown a high shrinkage rate of approximately one third of the vagina, with partial or complete obliteration leading to dyspareunia in 21-42% of cases.[9,10] Moreover, the application of continuous dilatation or nighttime stenting should be carried out in sexually inactive women. This presents a problem for unmarried young women in Turkey who are unmotivated in carrying out prolonged dilatation because of their moral taboos. Because of the limitations of these procedures, which were discussed above, new treatment modalities have been developed.

The main advantages of intestinal vaginoplasty include the avoidance of post-operative vaginal dilatation, adequate vaginal length, natural lubrication, possibility of early coitus, satisfactory sexual function, and lack of shrinkage. Vaginal stenosis is rarely seen in patients with intestinal vaginoplasty.[11,12] In our previous studies, we suggested that sigmoid vaginoplasty is the treatment of choice for patients with vaginal agenesis. Sigmoid colon's large lumen, thick walls that are resistant to trauma, adequate secretion allowing lubrication, short recovery time compared with ileum vaginoplasties and avoidance of applying prolonged dilatation, indicate the importance of sigmoid vaginoplasty in treating vaginal agenesis.[13,14]

In conclusion, a sigmoid vaginoplasty would be an appropriate choice for patients who still have a hairy and/or tight vagina after undergoing a pudendal thigh flap operation. Moreover, after having this procedure performed, the sexual life and psychological status of the patient is likely to improve.

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