

**NEO-VAGINAL PROLAPSE IN MAYER-ROKITAN-CUSTER SYNDROME: A  
CASE REPORT**

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**INTRODUCTION**

The creation of an artificial vagina from the sigmoid colon is the operation of choice and can be used for any variant of the anatomical structure of the perineum. However, various authors describe an uncommon complication of sigmoidal colpopoiesis as neovaginal prolapse. We present the case of a 35-year-old woman with a history of sigmoid colpopoiesis who underwent promontopexy for grade IV apical prolapse. The postoperative period was uneventful and no signs of recurrent prolapse were observed. This clinical case demonstrates the possibility of using promontopexy as a surgical treatment for apical prolapse after sigmoidal colpopoiesis in a patient with SMRK.

**Key words:** *Mayer-Rokitansky-Kuester syndrome, sigmoidal colpopoiesis, neovaginal prolapse, promontopexy.*

**METHOD**

Despite a significant number of publications in recent years on the problem of malformations of the internal genital organs of a woman, the frequency in the population is considered to be established for only one defect - Mayer-Rokitansky-Kustner syndrome (SMRK). Their frequency, according to different authors, ranges from 1 in 20,000 to 1 in 4000-5000 [1,2,4,5,7,14] newborn girls.

The quality of life of patients with congenital anomalies of the genital organs, as well as the solution of problems of sexual and reproductive functions, is largely determined by the effectiveness and validity of surgical correction. Most reported cases are sporadic, but familial forms also occur. SMRK is characterized by aplasia of the uterus and upper 2/3 of the vagina with normal development of the ovaries, external genital organs and secondary sexual characteristics in the absence of chromosomal abnormalities (karyotype 46XX) [3,5].

According to A.G. Sarukhanov. when analyzing the outcomes of sigmoidal colpopoiesis, assessed 6-24 months after surgery, in 8 of 22 patients, partial prolapse of the neovaginal walls was found [2,6]. Barnokulov OM, (2003) the probability of minor complications after operations still remains, so in 39 operated patients there was a partial prolapse (up to 2-3 cm) of the walls of the artificial vagina in 2 (5.1%) cases [1]. Djordjievich et al. reported in their series of studies that the incidence of prolapse was 8.1% [8]. Overall, some data indicate that the incidence of neovaginal prolapse is approximately 2.3% [10,11].

A 35-year-old patient was admitted with complaints of discomfort and a feeling of a foreign body in the perineal region. From the anamnesis: At the age of 16, she turned to a gynecologist, with the correct physical and sexual development, with complaints about the absence of menstruation. Was examined and diagnosed with Mayer-Rokitansky-Kustner syndrome. At the age of 17, sigmoidal colpopoiesis was performed. After 17 years, she was admitted with neovaginal prolapse. Excision of the neovaginal mucosa was performed; after 6 months, a relapse was re-operated. At this reception, the assessment of the general and gynecological status was carried out by examination and the degree of prolapse was studied using the POPQ system proposed by the ISC (International Continence Society) in 1996. When examining the genitourinary organs, first of all, the state of the mucous membrane and skin of the vestibule of the vagina, the external opening of the urethra, the perianal region was assessed; attention was paid to the presence of free secretions, their color, character, and also the condition of the mucous membrane of the neovagina was assessed. Diagnosed with IV degree of prolapse: Aa

3, Ap 4, C 4, gh 3, pb 3, tvl 8, Ba 1, Bp 2. The patient underwent promontopexy as a surgical treatment for apical prolapse with SMPK. Informed consent was obtained for the procedure. The closest postoperative observation was carried out in 15-30-45 days, there were no complications or complaints.

## DISCUSSION

Our case has shown that when neovaginal prolapse occurs after sigmoidal colpopoiesis, several complex aspects must be taken into account. Our patient has undergone surgical correction of her neovaginal prolapse several times. Our experience is consistent with the literature review we found.

Evaluation of long-term results of classical sigmoidal colpopoiesis performed according to the method of E.E. Gigovsky, showed that 7 patients (13.46%) out of 52 have such complications as narrowing of the entrance to the artificial vagina - 3 observations (5.77%), prolapse of the mucous membrane - (3.845%) and the walls of the artificial vagina - 2 ( 3.845%) [1.3].

A comparative study of the results of colpopoiesis was carried out in two groups of patients. The first group (31) was operated on from 1976 to 1987. For these patients, the plastic of the vagina is completed by the imposition of a circular "intestinal-mucous" or "intestinal-cutaneous" anastomosis on the perineum. Here, stenosis of the entrance to the neovagina was observed in 3 patients (9.68%), and prolapse of the mucous membrane in 2 patients (6.45%). It should be noted that these complications develop in the first 6-8 months after surgery. The prolapse was eliminated by excision of the excess mucous membrane, followed by plastic surgery of the vaginal opening using opposite flaps.

The second group (33) consisted of patients operated on in the period from 1988 to 1990. sigmoidal colpopoiesis is completed by plastic surgery of the entrance to the neovagina using "muco-mucous" or "muco-cutaneous" anastomosis with opposite flaps. Complications in this group were not noted [3].

A scientist from Japan (2021) describe a clinical case of the use of laparoscopic sacrocolpopexy (LSC) in a 59-year-old woman with a history of sigmoid vaginoplasty, which was performed for grade IV sigmoid stump prolapse. This clinical case demonstrates the possibility of using LSC as a surgical treatment for sigmoid colon stump prolapse in patients with SMRK [14].

In the work of Ivo Feichnel-Schaing (2021), a literature review was carried out and a clinical case of a 41-year-old woman with grade IV neovaginal prolapse was described. As the case showed, when a prolapse of the neovagina occurs after sigmoidal colpopoiesis, it is necessary to take into account several difficult aspects. First of all, the length of the neovagina, the need to preserve the vascular pedicle, an interdisciplinary approach and highly qualified surgeons who know the procedure [9].

Summing up, we can say that according to the literature there are no standards for the technique of surgical correction of prolapse.

In this regard, there is a need to develop ways to prevent prolapse of the neovagina during sigmoidal colpopoiesis surgery in patients with SMRK.

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