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Treatment of cervical agenesis with minimally invasive therapy: Case report



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ABSTRACT

Cervical agenesis is very rare congenital disorder case with cervical not formed. Because of cervical clogged so that menstruation can not be drained. We Report the case of a 19 years old women still single with endometrioma, hematometra, cervical agenesis and perform surgery combination laparoscopy and transvaginally with laparoscopic cystectomy, neocervix, and use catheter no 24f in the new cervix. And now she can currently be normal menstruation. Minimally invasive therapy of congenital anomalies case is recommended to save reproductive function.

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Introduction

Cervical agenesis is a rare congenital disorder. The prevalence of this case is one of 80,000 women.¹ According to the *American Society of Reproductive Medicine* this disorder is the 1B classification of Müllerian anomaly.² Clinical appearance of the case is an absence of menstruation which is accompanied by cyclic abdominal pain and abdominal bloating.³ Management of this case is not only intended to eliminate complaints but also has to think about fertility in the future; therefore, minimally invasive therapy is very appropriate for this case. This case report reported cervical agenesis treatment with minimally invasive therapy combined with laparoscopy and transvaginal surgery.

Case report

A woman, 19 years, still single, came with cyclic abdominal pain, enlarged stomach and not menstruated since 1 year ago. The surgery was done three years ago with laparotomy and transvaginal surgery such as cystectomy, hematometra drainage and placement of catheter 24f intrauterine due to chocolate cysts, hematometra, and cervical agenesis. The results of an anatomic pathology of the endometriotic cyst. Three weeks later the catheter was removed by itself and after that, the patient has not controlled anymore.

Physical examination indicated that there was palpable mass in the abdomen with a size of 15 cm. Regarding the transvaginal surgery which had been done previously, then vaginal toucher and visual inspection were carried out and showed Carunculae hymenalis, probe 8 cm, and no portion erosion was found. Ultrasound examination showed hematometra and bilateral endometriomas (chocolate cysts). Magnetic resonance imaging examination displayed a septated cystic mass with solid components in bilateral adnexa (larger right), suggestive of uterine cervix anomaly and hematometra (Fig. 1). The Patient was diagnosed with hematometra, bilateral endometrioma, agenesis of the uterine cervix, history of earlier hematometra drainage and cystectomy. When the operation is found the right endometrioma, hematometra, bilateral hematosalpinx, and cervical agenesis. The first thing to be done was the laparoscopic right cystectomy, drainage of bilateral hematosalpinx, adhesiolysis of tubes and left ovary. Then hematometra drainage was done by making an incision in the uterine fundus about 3–4 cm vertically and hematometra suction (50–60 cc) was done as well. The probe was inserted into the uterine cavity through the incision in the fundus as a marker. This surgery was continued transvaginally for neocervix (new cervix from part of the vagina) using protrusion of probe marker of the abdomen as a guide. Hole of the probe was widened and deepened bluntly thereby the probe marker appeared from the vagina and then the interrupted sutures were made at 12,2,3,5,6,8,9,10 o'clock. The 24f catheter was inserted into the uterine cavity through the probe marker guidance, catheter balloon was inflated with 12 ml of water and maintained for one month to prevent the holes from closing as well as for

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Fig. 1. Magnetic resonance imaging examination.

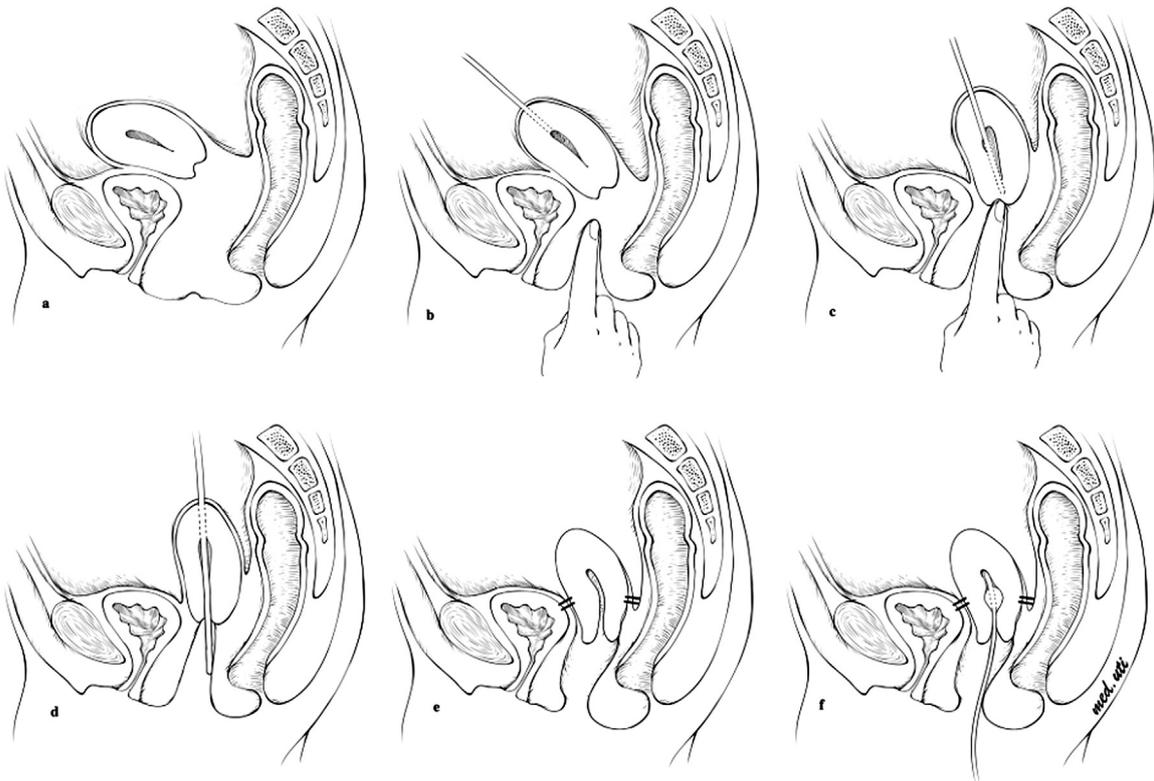


Fig. 2. Surgical maneuver schema (a) Prior to the operation, the uterine cervix is small and the vagina is unobservable. The neovagina was manually constructed between the bladder and the rectum, and toward the uterus. (b) The probe was inserted into the uterus and strongly pushed inferiorly to reveal the uterine cervix. (c) The finger palpable the probe and incision vaginally. (d) The probe through to vagina. (e) The uterus was sutured with the peritoneum. (f) Twenty-four f catheter inserted into uterine cavity.

menstruation drainage (Fig. 2). Currently the patient worked up with combined oral contraceptives to suppress the progression of endometriosis.

Discussion

Cervical agenesis is a rare case in which the management is not easy because there are no many medical personnel exposed to this case.⁴ This abnormality often causes an absence of the connection between the uterus and the vagina so that menstrual blood cannot be drained properly. This makes the menstrual blood is collected continuously in the uterus. When the uterus is full then the menstrual blood will be spread to the fallopian tubes which become hematosalpinx and ovaries become endometrioma. The disorder is not life threatening but it will make the patient feel uncomfortable. If it persists for a long time and not be managed properly, it may lead to complications such as kidney disorders and infertility problems.⁵

In this case, the patient had experienced complaints of having no menstruation, abdominal bloating and cyclic abdominal pain since one year ago so that the menstrual blood is collected for 12 cycles. In addition, hematosalpinx and endometrioma also occurred in which Results of anatomic pathology showed endometriosis. This makes fertility will be impaired in the future.

Minimally invasive therapy such as laparoscopy is the right choice, especially for those who suffered and are potentially experiencing fertility disorder. Using laparoscopy the anatomy will be viewed more clearly and reduce the likelihood of adhesion that can restrict the movement of tubes and ovaries compared with laparotomy. In addition, the laparoscopy has some advantages such as minimal pain, minimal blood, and rapid mobilization.⁶ So prognosis for fertility better with minimally invasive surgery.

In this case, the minimally invasive therapy was combined with laparoscopy with transvaginal surgery. The operation resulted in an adhesion which is likely due to previous surgery and endometriosis. In addition to cystectomy, drainage of hematosalpinx and hematometra, the contralateral adhesiolysis was also done to prepare fertility in the future thereby the tubes and ovaries can move well. Neocervix was made with the main objective to drain the menstrual blood and maintain sexual function. Placement of the largest intrauterine 24F-catheter is expected to prevent the portion newly created from closing or relapse.^{7–9} After the operation, the

patient is conditioned not to menstruate for 3 cycles with hormonal contraception beside for suppress the progression of endometriosis. After the catheter was removed patient follow up with a speculum examination and will do buccination when needed. Other than that after hormonal discontinued we will be monitoring menstrual period. Three-month follow-up for the first done once a month. Once that is done every 3 months. For fertility prognosis for this patient still unknown because of patient not yet marriage. In Dr Soetomo hospital from 2013 until 2016 have 3 cases do with laparotomy. All case was recurrence and when do second operation great adhesion happen so in last case laparoscopy perform with no complain, good menstrual period and neocervix in good condition until now.

Conclusion

Treatment of cervical agenesis with minimally invasive therapy is strongly recommended for menstrual blood drainage and also for maintaining fertility in the future.

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