



Profile and life quality of vaginal septum patients operated using vaginal approach

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Abstract

Introduction: The proportion of vaginal anomalies is generally 10% of all female reproductive tract anomalies. This study aimed to determine the characteristics and quality of life of patients with vaginal septum carried out operatively using the vaginal approach.

Methods: This was a descriptive study with a retrospective approach. The characteristics of subjects were collected using secondary data from medical records from January 2014 to December 2018, while quality of life of subjects was measured by WHOQOL questionnaire.

Results: Among fourteen patients with vaginal septum who performed an operative method with the vaginal approach, the most age distribution was <20 years (n=10, 71.4%). The majority of patients were single (n=10, 71.4%). There were 8 patients (57%) having menstruation. The most accompanying condition was hematometra-hematocolpos (n=5, 35.71%). There were 3 patients (21.42%) who had repaired. Most patients (n=13, 92.86%) did not report postoperative complaints. There were 11 patients (78.6%) having a good or satisfied quality of life. The mean results of the Physical Health domain were 55.42±9.112, Psychological domain was 66.21±9.374, Social Relationship domain was 63.00±12.949, and Environment domain was 61.85±6.981.

Conclusion: Most patients with vaginal septum was less than 20 years, and the quality of life of was quite good, with only the physical aspect having a lower value.

Keywords: vaginal septum, quality of life, WHOQOL

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INTRODUCTION

Congenital anomalies can be one of the risk factors in increased morbidity and mortality rates in newborns or in a child's growth and future development disorders (Kadri et al. 1995). Several congenital abnormalities may not manifest until adolescence, and some congenital abnormalities from birth or in childhood can remain a problem throughout adolescence, especially after puberty (Edmonds, 2003). The proportion of vaginal anomalies is generally 10% of all female reproductive tract anomalies. Congenital vaginal obstruction usually occurs after puberty, and the presentation in infancy is rare (Ameh et al. 2011). Formation of the female genital tract is a complex process involving several events, such as the process of cellular differentiation, migration, fusion, and canalization (Quint et al. 2010). If this process does not occur, or there is interference from the process, congenital abnormalities will occur. Congenital abnormalities in the female genital tract are defined as deviations from normal anatomy caused by embryonic

malformations in the Mullerian or paramesonephric ducts. Failure to manage this disorder can cause side effects on physiological function, psychology, and reproductive health (Qureshi et al. 2005).

Vaginal septum arises if there is a failure of fusion and/or canalization of the urogenital sinus and Mullerian duct. The transverse vaginal septum is formed as a result of failure to fuse the final part of the paramesonephric duct entirely or only in part fused with the urogenital sinus (Edmonds, 2003). Gynecological examination shows that the vagina is short, with the upper end closed or with a small hole. The cervix cannot be seen clearly, and the uterus can be palpated (Sittisom, 2020). If menstrual blood is retained, a mass forming above the septum will be palpable (Quint et al. 2010). Meanwhile, the longitudinal vaginal septum is a developmental abnormality in the lower end of the paramesonephric duct (Edmonds, 2003; Dadvar-Khan,

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& Ghanian, 2016). Strategic Management of Rural Tourism Towards Gender-Sensitive Planning. *International Journal of Geography and Geology*, 5(11), 236-248.). When two channels become one, the septum between them does not disappear (forming a complete longitudinal vaginal septum) or does not completely disappear (forming an incomplete longitudinal vaginal septum) (Quint et al. 2010). Longitudinal vaginal septum mostly has no symptoms, and some are found only when they encounter difficulty during pregnancy (Edmonds 2003). Another rare manifestation of Müllerian ducts abnormalities is Herlyn-Werner Wunderlich syndrome (HWWS) which also need high suspicious in diagnoses (Ngan et al. 2019).

The prevalence of Mullerian duct anomalies is also different, with reports ranging from 0.16-10% (Ameh et al. 2011). In terms of management, because of the rarity of this case (Luo, 2020), it is not uncommon that the action taken to manage this disorder is far from what is recommended, whereas if the diagnosis is right, sometimes the actions that need to be done are quite simple (Shah et al., 2016). From the actions for the vaginal septum, it can be assessed the state of quality of life of sufferers. Many social aspects are assessed from the results of the actions obtained (Haseeb et al., 2020). Thus, it can affect the patient's daily life and daily activities. This study aimed to identify the profile and quality of life of patients with vaginal septum who performed operative measures with the vaginal approach.

METHODS

This was a retrospective study with descriptive methods. This research was conducted on vaginal septum patients who had performed the action with the vaginal approach. This study used secondary data from the 2014-2018 medical records at Dr. Soetomo Hospital, Surabaya, Indonesia and primary data through the quality of life questionnaire from WHO, namely the World Health Organization Quality-of-Life (WHOQOL) in patients with the vaginal septum. The WHO quality of life questionnaire is divided into four domains to evaluate the value of a person's quality of life, where the value is linear, the higher the number means the better the quality of life. The quality of life of the subjects was calculated and analyzed descriptively.

RESULTS

During 2014-2018, there were 14 vaginal septum patients in Dr. Soetomo Surabaya, who had taken action with a vaginal approach. Then, patients were given a quality-of-life questionnaire (WHOQOL) to assess patients' quality of life. **Table 1** shows the characteristic of the subjects. Of the 14 cases of the vaginal septum in Dr. Soetomo Hospital from January 2014 to December 2018, 10 patients (71.4%) with age under 20 years were

Table 1. Characteristics of subjects

| Characteristics | n | % |
|--|----|-------|
| Age (years) | | |
| <20 | 10 | 71.42 |
| 20-35 | 4 | 28.58 |
| Marriage Status | | |
| Married | 4 | 28.58 |
| Not married | 10 | 71.42 |
| Menstrual History | | |
| Yes | 8 | 57.14 |
| No | 6 | 42.86 |
| Accompanying Condition | | |
| Hematometra | 2 | 14.26 |
| Hematocolpos | 1 | 7.14 |
| Hematocolpos + Hematometra | 5 | 35.71 |
| Hematocolpos + Hematometra + Hematosalpinx | 3 | 21.42 |
| Etc. | 3 | 21.42 |
| Action Type | | |
| Incision + Drainage | 6 | 42.85 |
| Excision + Drainage | 1 | 7.14 |
| Neovagina | 1 | 7.14 |
| Repairing the septum | 1 | 7.14 |
| Incision + Marsupialization | 3 | 21.42 |
| Excision + Marsupialization | 2 | 14.26 |
| Postoperative complaints | | |
| Pain | 1 | 7.14 |
| No complaints | 13 | 92.86 |
| History of postoperative repair | | |
| Yes | 3 | 21.42 |
| No | 11 | 78.58 |

Table 2. Quality of life based on WHOQOL

| Quality of life | n (%) |
|-----------------|------------|
| Satisfied | 11 (78.6%) |
| Not satisfied | 3 (21.4%) |

found. The majority of patients were single, the majority were single (n = 10, 71.4%). Characteristics, according to the menstrual history, found 8 patients (57.14%) having menstruation. The most common participants in vaginal septum patients were hematocolpos and hematometra (n = 5, 35.71%). The most types of treatment in vaginal septum patients were incision and drainage (n = 6, 42.85%). Of the 14 cases of vaginal septum in Dr. Soetomo Hospital, Surabaya, the majority of patients had no postoperative complaints (n = 13, 92.86%). After surgery, 3 patients (21.42%) were repaired postoperatively.

Of the 14 postoperative vaginal septum patients, quality of life was measured using WHOQOL quality of life scoring. **Table 2** shows that 11 (78.6%) patients had a good or satisfied quality of life.

Table 3 shows the distribution of quality of life scores by domain. The average results of the Physical Health domain were 55.42±9.112, the Psychological Domain was 66.21±9.374, the Social Relationship Domain was 63.00±12.949, and the Environment was 61.85±6.981.

DISCUSSION

This study found that the majority of vaginal septum patients were less than 20 years old, with the most accompanying conditions being hematometra and hematocolpos caused by obstruction. The majority of patients performed incisions and drainage, with the majority of patients not experiencing postoperative

Table 3. Quality of life scores based on WHOQOL

| | Domain 1 Physical Health | Domain 2 Psychological | Domain 3 Social Relationship | Domain 4 Environment |
|--------------------|-----------------------------|---------------------------|---------------------------------|-------------------------|
| Mean | 55.42 | 66.21 | 63.00 | 61.85 |
| Standard Deviation | 9.112 | 9.374 | 12.949 | 6.981 |
| Minimum | 38 | 44 | 31 | 44 |
| Maximum | 75 | 81 | 81 | 69 |

complaints. From the aspect of quality of life, in general, the quality of life of patients with vaginal septum performed is quite good, with only the physical aspect having a lower value. This study's results are in line with previous studies with the average age of the subject, which is 13 years. Age is closely related to reproductive potential or fertility. Age also determines when people experience a change that exists in them (Lutfiya 2016). Menstrual cycles play an important role in women's reproductive health (Ikhsan et al. 2017). However, some women experience menstrual disorders (Siregar et al. 2014). Hematocolpos in adolescent girls is a rare condition appearing as a distended vaginal filled with blood due to accumulation of menstrual products caused by uterovaginal anomalies (Deligeoroglou et al. 2012). Congenital vaginal obstruction usually occurs at puberty with abdominal pain, amenorrhea, and hematometocolpos (Ameh et al. 2011, Okoro et al. 2018). The treatment for this condition in young girls is basically to surgically relieve obstruction and establish a vaginal tract, the follow-up treatment to ensure the patency of the tract in young girls presents peculiar challenges (Okoro et al. 2018).

Some of these congenital abnormalities in the vagina have psychological implications for patients and their families, and they need to be treated. Many adolescents experience this case, their age and maturity must be considered when planning treatment options and time (Quint et al. 2010). The quality of life of patients in this study was measured using a WHOQOL quality of life scoring in which the majority of patients were satisfied postoperatively. However, lower results were found in the Physical Health domain. The majority of patients in physical health were less satisfied. Further evaluation is needed because there are many other influential aspects, such as comorbid conditions, subjectivity, and others. In the Psychological domain, most sufferers felt that after their actions, they felt more satisfied because

they felt more "intact" and assessed that the disorder has been corrected. Correct understanding will influence the psychological condition of young women to be ready to face new changes in themselves (Lutfiya 2016). Psychological assistance is needed in adolescents with problems such as when they begin to recognize their sexuality (Deligeoroglou et al. 2012). This is so as not to cause mental health problems in adolescents, such as depression. If it has severe impacts, the use of antidepressants is needed (Chee et al. 2016). In the Social Relationship domain, most patients did not experience problems in social relationships, and most of them said that their social relations were not problematic both before and after surgery. The majority of sufferers are environmentally satisfied. The environment has broad aspects because it is related to the financial and environmental aspects around the patient's residence, so the medical aspects do not completely influence this. For this aspect, most patients were satisfied. Social environment and good people around adolescents can have a tremendous impact on the development of life values and also spirituality (Wirawan et al. 2018). Finally, an extremely careful assessment of the psychological status of the patient is imperative. The risks of not involving the psychologists in the management of these patients may cause long-term irreparable damage (Edmonds 2003).

CONCLUSION

Most of the vaginal septum patients aged less than 20 years, with the most accompanying conditions are hematometra and hematocolpos caused by obstruction. Most of the patients performed incision and drainage, with most patients not experiencing complaints after surgery. From the aspect of quality of life, in general, the quality of life of patients with vaginal septum performed is quite good, with only the physical aspect having a lower value.

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