Research Article

Body Image and Quality of Life after Neovaginoplasty in MRKH Syndrome Patients: A Comparative Mixed-Methods Study of Amnion Graft versus Davydov Techniques at Hasan Sadikin Hospital Bandung

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Abstract
Objectives: This study aims to compare body image (Body Image Scale, BIS) and quality-of-life outcomes between Amnion Graft and Davydov, and to explore sociocultural mechanisms and compliance barriers among MRKH patients post-surgery.
Methods: An explanatory sequential mixed-methods study was conducted at Dr. Hasan Sadikin General Hospital, Bandung (2023–2025). The quantitative phase used a comparative retrospective cohort (total sampling), analyzed with Independent t-test and Fisher's Exact test, followed by in-depth interviews (purposive sampling) with thematic analysis.
Results: Among 30 subjects (26 Amnion Graft, 4 Davydov), Amnion Graft had significantly lower BIS scores (4.23 ± 3.81 vs 11.50 ± 4.12; p=0.002), indicating less body image distress, while EuroQol-5 Dimension-5 Level (EQ-5D-5L) scores were equivalent (6.00 ± 1.05 vs 6.00 ± 1.15; p=1.000). Qualitative findings showed this equivalence reflected social masking and resignation toward fertility stigma, not freedom from trauma. Low self-dilation compliance (43.3% never performed it) stemmed from educational misconceptions, mental exhaustion, and frustration with outcomes.
Conclusion: Amnion Graft yielded statistically better body image outcomes, but anatomical success alone did not resolve patients' identity crisis; MRKH management requires a multidisciplinary, patient-centered approach with continuous psychological support.

Keywords: MRKH; Amnion Graft; Davydov; Body Image Scale; EQ-5D-5L

Citra Tubuh dan Kualitas Hidup Pasca-Neovaginoplasti pada Pasien Sindrom MRKH: Studi *Mixed-Methods* Komparatif Metode Amnion Graft versus Davydov di Rumah Sakit Hasan Sadikin Bandung

Abstrak
Tujuan: Penelitian ini bertujuan untuk membandingkan luaran citra tubuh (BIS) dan kualitas hidup antara metode Amnion Graft dan Davydov, serta mengeksplorasi secara kualitatif mekanisme sosiokultural dan hambatan kepatuhan pasien MRKH pascaoperasi.
Metode: Penelitian ini merupakan studi *explanatory sequential mixed-methods* yang dilakukan di RSUP Dr. Hasan Sadikin Bandung (2023–2025). Fase kuantitatif menggunakan desain kohort retrospektif komparatif (*total sampling*), dianalisis dengan uji *Independent t-test* dan *Fisher's Exact*, dilanjutkan wawancara mendalam (*purposive sampling*) dengan analisis tematik.
Hasil: Dari 30 subjek (26 Amnion Graft, 4 Davydov), kelompok Amnion Graft memiliki skor BIS signifikan lebih rendah (4,23 ± 3,81 vs 11,50 ± 4,12; p=0,002), menunjukkan distres citra tubuh lebih minimal, sedangkan skor EQ-5D-5L setara (6,00 ± 1,05 vs 6,00 ± 1,15; p=1,000). Temuan kualitatif menunjukkan kesetaraan ini mencerminkan *social masking* dan kepasrahan menghadapi stigma fertilitas, bukan bebasnya pasien dari trauma. Rendahnya kepatuhan dilatasi mandiri (43,3% tidak pernah melakukan) dipicu miskonsepsi edukasi, kelelahan mental, dan frustrasi terhadap luaran anatomis.
Kesimpulan: Amnion Graft memberikan luaran citra tubuh yang secara statistik lebih baik, namun keberhasilan anatomis saja tidak menyelesaikan krisis identitas kewanitaan pasien, sehingga tata laksana MRKH membutuhkan pendekatan multidisiplin berpusat pasien dengan dukungan psikologis berkesinambungan.

Kata kunci: Amnion Graft; Body Image Scale; Davydov; EQ-5D-5L; MRKH

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Introduction

Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome is a congenital anomaly of the female reproductive tract characterized by agenesis of the uterus and the proximal two-thirds of the vagina in individuals with normal secondary sexual characteristics and a 46,XX karyotype.[1,2] With an incidence of approximately 1:4,500–1:5,000 live female births, MRKH is one of the most common causes of primary amenorrhea.[1,2] Diagnosis is typically established during adolescence when patients present with primary amenorrhea despite normal secondary sexual development.[1] Beyond anatomical reproductive disturbances, MRKH also has a significant impact on the psychological and social aspects of patients, as well as on the formation of feminine identity.[3,4] Patients with MRKH syndrome are at higher risk of body image disturbance, anxiety, depression, and reduced quality of life due to primary amenorrhea, infertility, and sexual function limitations that can affect feminine identity and self-acceptance.[3,4,5] Therefore, the success of MRKH management should be assessed not only by anatomical outcomes but also by psychological aspects and quality of life.[4,6] The Body Image Scale (BIS) is an instrument used to evaluate patients' perception of and satisfaction with their body after intervention, while EQ-5D-5L assesses health-related quality of life across several physical and psychological dimensions.[7,8,9] Using both instruments allows for a more holistic assessment of neovaginoplasty success in MRKH patients.[3-9] The primary goal of MRKH management is to create a functional neovagina to improve patients' quality of life through dilation therapy or neovaginoplasty.[6] At Dr. Hasan Sadikin General Hospital, Bandung, the most commonly used techniques are Amnion Graft and Davydov. Both techniques have been shown to provide good anatomical and functional outcomes with low complication rates.[10-13] However, most studies have focused on anatomical success, while evaluation of body image, health-related quality of life, and postoperative behavioral factors such as dilation compliance, sexual activity, and psychosocial support remain limited, even though these factors play an important role in the long-term success of neovaginoplasty.[3,4,6,14]

To date, data on body image and health-related quality of life among MRKH patients after neovaginoplasty in Indonesia remain limited. At Dr. Hasan Sadikin General Hospital, Bandung, no previous study has compared the Amnion Graft and Davydov methods based on BIS and EQ-5D-5L outcomes. This study aimed to compare body image outcomes using BIS and health-related quality of life using EQ-5D-5L between the Amnion Graft and Davydov methods in MRKH patients after neovaginoplasty, and to qualitatively explore the sociocultural mechanisms and compliance barriers among MRKH patients after surgery.

Methods

This study used an explanatory sequential mixed-methods design aimed at evaluating clinical, psychological, and sociocultural outcomes in MRKH patients at the Department of Obstetrics and Gynecology, Dr. Hasan Sadikin General Hospital, Bandung, with data collected from January 2023 to December 2025. In the quantitative phase, a comparative retrospective cohort study was conducted using total sampling of MRKH type I or II patients who had undergone Amnion Graft or Davydov neovaginoplasty with a minimum follow-up of 6 months and who were willing to sign informed consent; exclusion criteria consisted of incomplete medical record data. The independent variable of surgical technique was evaluated against the dependent variables of body

image (BIS questionnaire, score 0–30) and quality of life (EQ-5D-5L index score), which were then analyzed using SPSS version 26.0 through the Independent t-test for normally distributed data and Fisher's Exact test for categorical data ($p<0.05$). Univariate analysis was presented as mean ± standard deviation (SD) for numerical data and frequency and percentage for categorical data. Given the marked disparity in group size (Amnion Graft n=26 versus Davydov n=4), normality of the Davydov group was verified using the Shapiro-Wilk test prior to selecting the Independent t-test; because the small sample size limited statistical power, results for this comparison should be interpreted with caution, and this limitation is further addressed in the Discussion. Age and body mass index were not entered into a multivariate regression model to formally adjust for confounding, given the limited sample size of the Davydov group; their distribution across groups is instead reported descriptively in Table 1 and considered qualitatively when interpreting between-group differences. To explain the statistical findings in depth, a qualitative phase was conducted through semi-structured in-depth interviews to explore clinical anomalies, sociocultural mechanisms, and compliance barriers. Interview subjects were selected using purposive sampling, requiring representation from patients who were married, had not been sexually active in the past 3 months, and did not routinely perform self-dilation. Each in-depth interview lasted approximately 45–60 minutes and was conducted face-to-face in a private consultation room at the hospital to ensure confidentiality; all interviews were audio-recorded and transcribed verbatim. Data credibility was strengthened through source triangulation, corroborating interview findings with medical record data, and through member checking, in which preliminary interpretations were verified with participants. Thematic analysis followed the six-step framework of Braun and Clarke, encompassing familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This study was approved by the Health Research Ethics Committee of Dr. Hasan Sadikin General Hospital, Bandung, number DP.04.03/D.XIII.2.3/1033/2026.

Results

This study involved 30 MRKH patients after neovaginoplasty who met the inclusion criteria from a total of 49 patients, with predominant use of the Amnion Graft method (26 patients; 86.7%) compared with Davydov (4 patients; 13.3%). Most patients were in the young adult stage, with the Davydov group having a higher mean age than the Amnion Graft group (27.75 ± 5.32 vs 23.38 ± 5.29 years). In addition, the mean age at surgery was 22.43 ± 5.33 years, indicating that most patients underwent neovaginoplasty during a period when self-identity, interpersonal relationships, and sexual function become important aspects of life for MRKH patients.[3,4]

Based on Table 1, most patients were in an active social life stage, as shown by 53.3% (16) of patients who were married and 73.3% (22) who had a partner. In addition, 66.7% (20) of patients reported having been sexually active in the past three months, with all patients in the Davydov group being sexually active. This finding indicates that most patients had been able to adapt to intimate life after surgery, which is an important component of self-acceptance and quality of life in MRKH patients.[3,4] However, qualitative exploration showed that this ability to adapt to intimate life was still accompanied by hidden psychological crises and relational trauma. Patients frequently harbored fears regarding fertility expectations and were compelled to engage in social masking within their communities. This psychosocial burden was

Table 1 Sociodemographic Characteristics, Relationship Status, and Dilation Behavior of MRKH Patients by Surgical Method

Variable	Total (n=30)	Graft Vaginoplasty (n=26)	Davydov (n=4)
Current Age (years)	23.97 ± 5.41	23.38 ± 5.29	27.75 ± 5.32
Age at Surgery (years)	22.43 ± 5.33	22.12 ± 5.51	24.50 ± 3.87
Body Mass Index (kg/m²)	21.94 ± 3.44	21.50 ± 3.29	24.79 ± 3.47
Marital Status, n (%)			
Married	16 (53.3%)	13 (50%)	3 (75%)
Unmarried	14 (46.7%)	13 (50%)	1 (25%)
Has a Partner, n (%)			
Yes	22 (73.3%)	18 (69.2%)	4 (100%)
No	8 (26.7%)	8 (30.8%)	0
Sexually Active in Past 3 Months, n (%)			
Yes	20 (66.7%)	16 (61.5%)	4 (100%)
No	10 (33.3%)	10 (38.5%)	0
Lubricant Use, n (%)			
Yes	4 (13.3%)	4 (15.4%)	0
No	26 (86.7%)	22 (84.6%)	4 (100%)
Self-Dilation Frequency, n (%)			
Never performed	13 (43.3%)	12 (46.2%)	1 (25%)
1–3 times/week	9 (30.0%)	8 (30.8%)	1 (25%)
Every day (7 days)	8 (26.7%)	6 (23.1%)	2 (50%)
Dilation Duration, n (%)			
Not performed	13 (43.3%)	12 (46.2%)	1 (25%)
> 30 minutes	7 (23.3%)	5 (19.2%)	2 (50%)
15–30 minutes	6 (20.0%)	6 (23.1%)	0
< 15 minutes	4 (13.3%)	3 (11.5%)	1 (25%)

Table 2 Comparison of Body Image Scale (BIS) and EQ-5D-5L Scores between the Amnion Graft and Davydov Groups in MRKH Patients after Neovaginoplasty

Variable	Amnion Graft (n=26) mean ± SD	Davydov (n=4) mean ± SD	*p-value*
BIS Score	4.23 ± 3.81	11.50 ± 4.12	0.002
EQ-5D-5L	6.00 ± 1.05	6.00 ± 1.15	1.000

*Independent t-test (equal variances assumed based on Levene's test p>0.05).

clearly reflected in the statement of Patient AG-1 (25 years old, married and sexually active): "I'm generally fine, even to the point of pretending that I'm like other women who can menstruate… even if my husband can't accept my condition and wants to marry someone else because he wants children, I can genuinely accept that, doctor."

The postoperative maintenance phase also revealed significant clinical compliance challenges. A total of 43.3% (13) of patients never performed self-dilation, with the highest rate of non-compliance found in the Amnion Graft group (46.2%). In contrast, the Davydov group showed better compliance (50% performed dilation daily) and required no artificial lubricant at all, a finding consistent with the physiological advantage of the Davydov technique in generating natural lubrication secretion from the pelvic peritoneum.[12,13] Interestingly, lubricant use was found in only 13.3% of patients, all of whom were from the Amnion Graft group. Through in-depth interviews with Amnion Graft patients, it was found that the high discontinuation rate of dilation routines was rarely caused by physical pain, but was rooted in medical education misconceptions and clinical frustration. Some patients discontinued dilation because they believed that postmarital intercourse had already replaced the therapeutic function, as acknowledged by Patient AG-2 (22 years old, married): "I've been busy with work. The doctor also said it's fine once you're married." On the other hand, complete discontinuation was also triggered by patient disappointment over anatomical failure due to complications, as expressed by Patient AG-3 (21 years old, married): "It's stopped now because there's been no change… it's still not resolved even now.". This integrated data demonstrates that the long-term success of neovaginoplasty is highly dependent on continuous maintenance education and patients' mental resilience.

Comparative analysis showed that the Amnion Graft group had significantly lower body image distress (BIS) than the Davydov group (4.23 ± 3.81 vs 11.50 ± 4.12; p=0.002), indicating statistically better anatomical acceptance. Interestingly, the quality-of-life scores (EQ-5D-5L) of both groups remained statistically equivalent (6.00 ± 1.05 vs 6.00 ± 1.15; p=1.000). This intersecting quantitative finding can be explained through the sociocultural construction of Indonesian society, which highly glorifies fertility, where a woman's worth is often attached to her ability to bear children.[15] In-depth interviews with Amnion Graft patients revealed that improved neovaginal function did not automatically restore their social self-confidence entirely. Diagnosis and medical intervention often instead triggered a new identity crisis, as expressed by Patient AG-2 (22 years old, married): "Before the surgery I never felt anything… after the surgery I often withdrew, never socializing except with those closest to me." In addition, communal expectations related to marriage triggered latent psychological trauma that forced patients to suppress depression in order to appear resilient in front of their families, as acknowledged by Patient AG-4 (31 years old, unmarried): "My whole family keeps pushing me to get married… I hide my sadness, disappointment, and despair so my mother won't be disappointed." Therefore, the equivalence of quality-of-life scores (EQ-5D-5L) after neovaginoplasty in this study reflects a manifestation of adaptation and patient resignation (spiritual surrender) in facing cultural stigma in their environment, rather than an indication that the psychosocial burden of MRKH has been entirely eliminated.

Discussion

This study shows that the success of neovaginoplasty in MRKH patients can no longer be evaluated based solely on

anatomical success, but must be understood as a holistic process of body reconstruction, self-identity, and quality of life. The quantitative findings showed that the Amnion Graft group had significantly lower body image distress (BIS) than the Davydov group (4.23 ± 3.81 vs 11.50 ± 4.12; p=0.002). This indicates a discrepancy between physical outcomes and psychological condition: all Davydov patients could engage in sexual intercourse without needing artificial lubricant due to the advantages of the peritoneal tissue used, yet they still experienced higher body image distress. This finding suggests that anatomical and sexual function success alone is not sufficient to overcome the psychological burden and sociocultural pressure experienced by MRKH patients. In Indonesia, the ability to menstruate and have biological children is still often considered an important part of a woman's identity and worth in society.[15] In-depth interviews revealed that patients were compelled to engage in mentally exhausting social masking to avoid stigma, as acknowledged by Patient AG-1 (25 years old, married): "I'm generally fine, even to the point of pretending that I'm like other women who can menstruate." This qualitative finding is consistent with the global literature, which affirms that awareness of absolute infertility in MRKH often triggers an identity crisis and psychological distress far more persistent than vaginal agenesis itself.[16,17]

Although there were marked differences in body image acceptance, general quality of life (EQ-5D-5L) did not differ significantly between the two groups (p=1.000). This equivalence in scores occurred because the EQ-5D-5L instrument focuses more on basic life dimensions (mobility, daily activities, pain), making it less sensitive in capturing the depth of specific emotional conflict related to feminine identity after surgery.[7-9] Qualitative data demonstrated that quality of life that "appears good" on the questionnaire is often a manifestation of spiritual surrender and patients' efforts to suppress depression in order to preserve family expectations. This was clearly reflected in the account of Patient AG-4 (31 years old, unmarried): "My whole family keeps pushing me to get married… I hide my sadness, disappointment, and despair so my mother won't be disappointed." Furthermore, the long-term success of this reconstruction is severely threatened by low maintenance compliance, with 43.3% of patients found not to perform self-dilation. Qualitative analysis refutes the traditional clinical assumption that physical pain is the main barrier. Non-compliance was instead dominated by medical misconceptions, such as Patient AG-2 (22 years old, married), who stopped dilation based on a mistaken assumption: "I've been busy with work. The doctor also said it's fine once you're married," as well as frustration due to repeated anatomical failure, as experienced by Patient AG-3 (21 years old, married): "It's stopped now because there's been no change… it's still not resolved even now." Overall, this mixed-methods study confirms that clinical intervention for MRKH requires a multidisciplinary, patient-centered care approach involving a psychiatrist or clinical psychologist. Management should not end once neovaginal patency is achieved in the operating room, but must include precise maintenance education and continuous resolution of psychosocial trauma.

This study has several limitations that should be considered when interpreting the findings. First, the markedly unequal group sizes (Amnion Graft n=26 versus Davydov n=4) limited the statistical power of the between-group comparison and precluded multivariate adjustment for potential clinical confounders such as age and body mass index; the between-group difference in BIS score should therefore be interpreted as hypothesis-generating rather than conclusive, and the "Clinical Confounding Factor Analysis" referenced in earlier drafts

of the title has accordingly been removed to accurately reflect the descriptive, rather than adjusted, nature of this comparison. Second, the retrospective quantitative design and purposive sampling of the qualitative phase may limit the generalizability of the findings to the broader MRKH population. Future studies with larger and more balanced samples, together with multivariate confounder-adjusted analyses, are needed to confirm these findings.

Conclusion

This study shows that although the Amnion Graft group had lower body image distress (BIS) than the Davydov method, this anatomical success did not automatically eliminate feminine identity issues in MRKH patients. The equivalence in quality of life (EQ-5D-5L) between the two groups more strongly reflects adaptation to social stigma related to fertility in Indonesia rather than the complete elimination of psychosocial burden. In addition, the high rate of self-dilation discontinuation (43.3%) was rooted in mental exhaustion, post-marital educational misconceptions, and frustration, rather than physical pain alone. Therefore, MRKH management needs to shift from a sole focus on surgical success toward a multidisciplinary, patient-centered care approach, with psychological support to address identity and fertility issues, as well as more comprehensive postoperative education involving partners or family to maintain treatment compliance and prevent long-term stenosis.

Artificial Intelligence Usage Statement

The authors declare that no artificial intelligence tools were used in the preparation, analysis, or writing of this article.

Author Contribution Statement

SAR contributed to study conception and design, data collection, data analysis and interpretation, and drafting of the manuscript. DP, GMM, and AR contributed to study design, supervision, critical revision of the manuscript for important intellectual content, and final approval of the version to be published. All authors read and approved the final manuscript.

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Conflict of Interest

The authors declare no conflict of interest.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

References

1. Herlin M, Bjørn AMB, Rasmussen M, Trolle B, Petersen MB. Prevalence and patient characteristics of Mayer-Rokitansky-Küster-Hauser syndrome: a nationwide registry-based study. Hum Reprod. 2016;31(10):2384-90. doi: 10.1093/humrep/dew220
2. Morcel K, Camborieux L, Guerrier D; Programme de Recherches sur les Aplasies Müllériennes. Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome. Orphanet J Rare Dis. 2007;2:13. doi: 10.1186/1750-1172-2-13
3. Bean EJ, Mazur T, Robinson AD. Mayer-Rokitansky-Küster-Hauser syndrome: sexuality, psychological effects, and quality of life. J Pediatr Adolesc Gynecol. 2009;22(6):339-46. doi: 10.1016/j.

jpag.2008.11.006
4. Liao LM, Conway GS, Ismail-Pratt I, Bikoo M, Creighton SM. Emotional and sexual wellness and quality of life in women with Rokitansky syndrome. Am J Obstet Gynecol. 2011;205(2):117.e1-6. doi: 10.1016/j.ajog.2011.03.013
5. Pastor Z, Froněk J, Nováčková M, Chmel R. Sexual life of women with Mayer-Rokitansky-Küster-Hauser syndrome after laparoscopic Vecchietti vaginoplasty. Sex Med. 2017;5(2):e106-e113. doi: 10.1016/j.esxm.2016.12.003
6. Committee on Adolescent Health Care. ACOG Committee Opinion No. 728: Müllerian agenesis: diagnosis, management, and treatment. Obstet Gynecol. 2018;131(1):e35-e42. doi: 10.1097/AOG.0000000000002458
7. Hopwood P, Fletcher I, Lee A, Al Ghazal S. A body image scale for use with cancer patients. Eur J Cancer. 2001;37(2):189-97. doi: 10.1016/s0959-8049(00)00353-1
8. Herdman M, Gudex C, Lloyd A, Janssen M, Kind P, Parkin D, et al. Development and preliminary testing of the new five-level version of EQ-5D (EQ-5D-5L). Qual Life Res. 2011;20(10):1727-36. doi: 10.1007/s11136-011-9903-x
9. Janssen MF, Pickard AS, Golicki D, Gudex C, Niewada M, Scalone L, et al. Measurement properties of the EQ-5D-5L compared to the EQ-5D-3L across eight patient groups: a multi-country study. Qual Life Res. 2013;22(7):1717-27. doi: 10.1007/s11136-012-0322-4
10. Sarwar I, Sultana R, Nisa RU, Qayyum I. Vaginoplasty by using amnion graft in patients of vaginal agenesis associated with Mayer-Rokitansky-Kuster-Hauser syndrome. J Ayub Med Coll Abbottabad. 2010;22(1):7-10.
11. Bhandari S, Dangal G, Karki A, Pradhan H, Shrestha R, Bhattachan K, et al. Vaginoplasty with amnion graft: management of Mayer-Rokitansky-Kuster-Hauser syndrome. J Nepal Health Res Counc. 2024;21(3):530-3. doi: 10.33314/jnhrc.v21i3.4573
12. Aslan K, Gurbuz TB, Orhan A, Kasapoglu I, Ozerkan K, Uncu G. Long term sexual outcomes of Mayer Rokitansky Küster Hauser syndrome patients after Uncu-modified Davydov procedure. Facts Views Vis Obgyn. 2023;15(3):235-42. doi: 10.52054/FVVO.15.3.091
13. Piróg M, Bednarczyk M, Barabasz K, Kacalska-Janssen O, Jach R. Davydov-Moore vaginoplasty in Mayer-Rokitansky-Küster-Hauser syndrome: sexual and surgical outcomes. Arch Gynecol Obstet. 2025;312(1):119-24. doi: 10.1007/s00404-024-07830-6
14. Apfel VR, Takano CC, Marquini GV, de Jarmy di Bella ZIK, Girão MJBC, Sartori MGF. Treatment for vaginal agenesis: a prospective and comparative study between vaginal dilation and surgical neovaginoplasty. Int J Gynaecol Obstet. 2022;157(3):574-81.
15. Bennett L. Infertility, Womanhood and Motherhood in Contemporary Indonesia: Understanding Gender Discrimination in the Realm of Biomedical Fertility care. Intersections: Gender and Sexuality in Asia and the Pacific. 2012;1(28). doi: 10.25911/5F8H-1Y66
16. Heller-Boersma JG, Schmidt UH, Edmonds DK. Psychological distress in women with uterovaginal agenesis (Mayer-Rokitansky-Kuster-Hauser Syndrome, MRKH). Psychosomatics. 2009;50(3):277-81. doi: 10.1176/appi.psy.50.3.277.
17. Tsarna E, Eleftheriades A, Eleftheriades M, Kalampokas E, Liakopoulou MK, Christopoulos P. The impact of Mayer-Rokitansky-Küster-Hauser Syndrome on Psychology, Quality of Life, and Sexual Life of Patients: A Systematic Review. Children (Basel). 2022;9(4):484. doi: 10.3390/children9040484.