

Introduction

Rokitansky syndrome, also known as Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome, is a rare congenital anomaly characterized by uterovaginal aplasia (absence of the uterus and the upper two-thirds of the vagina). The primary goal of treatment is to create a neovagina and restore sexual function. However, postoperative outcomes regarding overall quality of life and sexual well-being remain debated. This study aimed to evaluate the quality of life and sexual function in patients who underwent surgical treatment for MRKH syndrome.

Methods

We conducted a retrospective, longitudinal, descriptive study involving 30 women with MRKH syndrome who underwent vaginoplasty (Davydov or McIndoe technique) at least one year prior. This study was conducted from 1998 to 2023 at the Maternity Center of Tunis. Patients were recruited during outpatient consultations, and a control group of sexually active women without gynecologic or psychiatric conditions was also enrolled. Data were collected through medical records and structured interviews, assessing sociodemographic and clinical characteristics, vaginal length, postoperative complications, and subjective perceptions of femininity, sexuality, and motherhood. Standardized tools used included the Arabic versions of the Female Sexual Function Index (FSFI) and the SF-36 quality-of-life questionnaire.

Results

The mean age of the patients was 28 years. Two surgical techniques were utilized: the McIndoe technique (50%) and the Davydov technique (50%). The mean postoperative vaginal length among our patients was 6.88 ± 1.72 cm. Twenty-three patients (76.6%) were considered to have achieved a satisfactory postoperative result, while the remaining seven patients (23.4%) had a vaginal length of less than 6 cm. At the time of the study, 18 patients (60%) were sexually active, with no significant differences in sexual activity between the two surgical techniques. Additionally, there were no statistically significant differences between the two groups in all dimensions of the Female Sexual Function Index (FSFI).

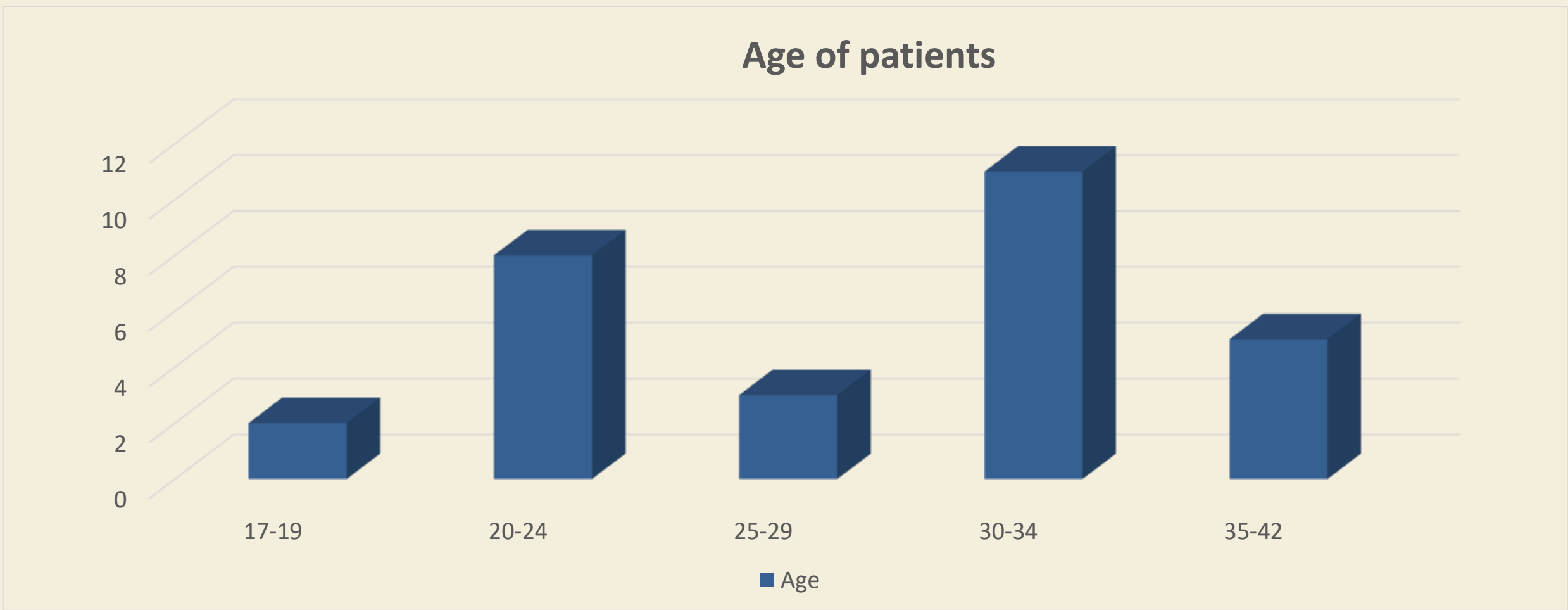


Fig.1: Age Distribution of Patients

FSFI	Patients N = 18	Controls N = 30	P
FSFI ≥ 26,55 (No sexual dysfunction)	5 (27,8%)	22 (73,3%)	0,002
FSFI ≤ 26,55 (sexual dysfunction)	13 (72,2%)	8 (26,7%)	

Table 1 : Comparison of FSFI Score Distribution Between Patients and Controls

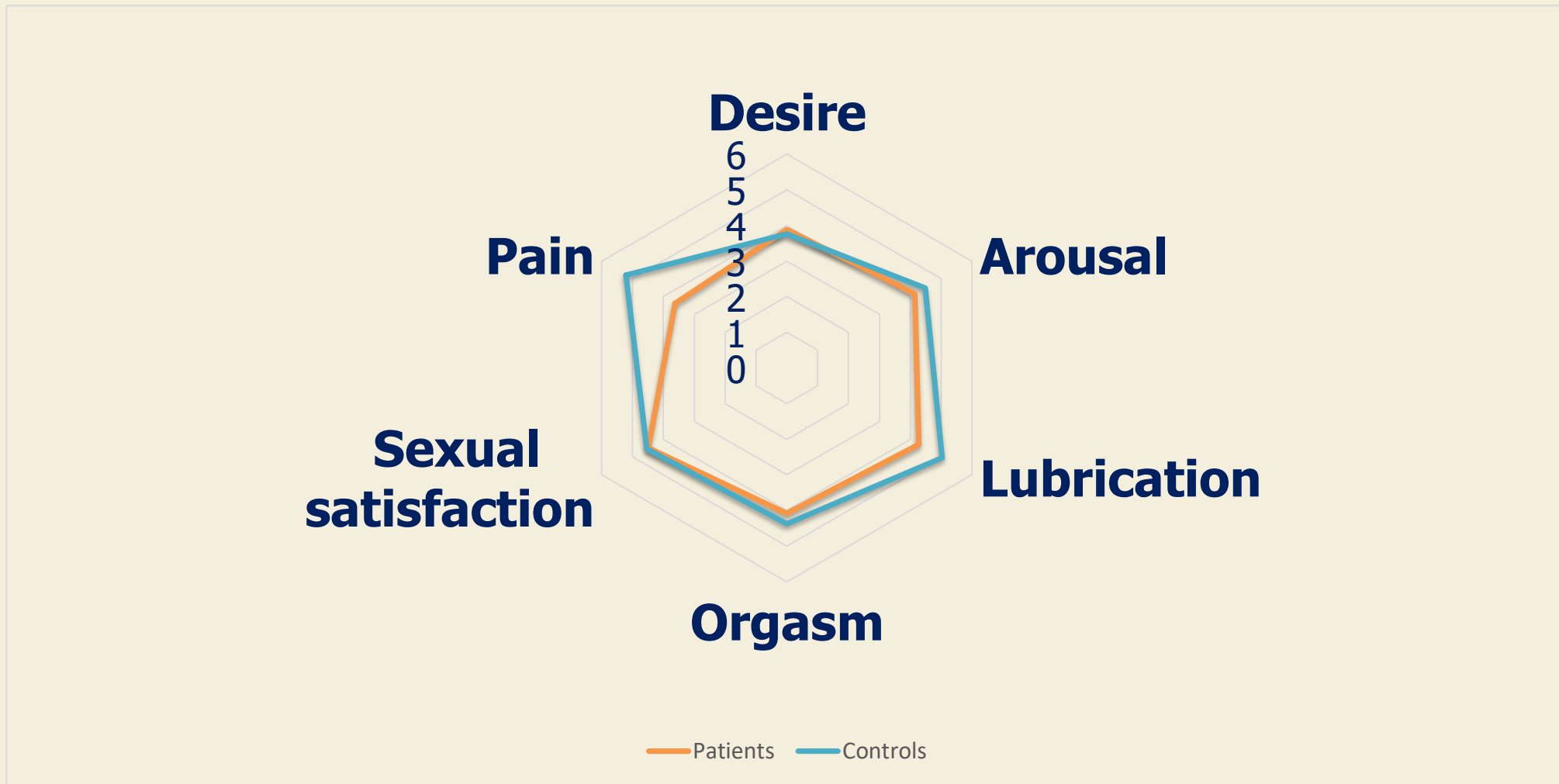


Fig. 2: Mean FSFI Domain Scores Among Patients and Controls

However, patients exhibited significantly lower FSFI scores in the Lubrication and Pain domains, as well as in the total FSFI score, compared to the control group. Regarding general quality of life, patients demonstrated significantly lower scores in the psychological component of the Short Form Health Survey-36 (SF-36) compared to controls, though physical quality of life showed no statistically significant difference.

SF-36	patients N = 30	controls N = 30	P
SG SF-36 ≥ 66,7 (Preserved quality of life)	26 (86,7%)	30 (100%)	0,038
SG SF-36 ≤ 66,7 (Impaired quality of life)	4 (13,3%)	0 (0%)	

Table 2: Distribution of Patients and Controls According to Overall SF-36 Score

Discussion

This study evaluated anatomical and functional outcomes of McIndoe and Davydov vaginoplasties in women with MRKH syndrome, along with the impact on sexual function and quality of life. The mean age at surgery was 22.5 years, aligning with literature recommending delayed intervention post-adolescence for optimal consent and engagement. Both techniques showed comparable anatomical success, with no significant difference in neovaginal length. Functionally, FSFI scores revealed no difference between surgical groups; however, patients with MRKH had significantly lower scores in lubrication and pain domains compared to healthy controls, confirming findings from Allen et al. and Giannesi et al. Psychological aspects, particularly the perception of femininity and infertility-related distress, profoundly influenced overall well-being. Despite surgical correction, patients showed reduced SF-36 mental component scores, consistent with prior studies.

Conclusion

This study highlights the importance of psycho-sexological evaluation following diagnosis and prior to treatment to assess patient expectations. Such assessments could help identify patients in need of psychological or sexological support, potentially enhancing both their future sexual function and overall quality of life.

References:

Giannesi A, Marchiole P, Benchaib M, Chevret Measson M, Mathevet P, Dargent D. Sexuality after laparoscopic davydov in patients affected by congenital complete vaginal agenesis associated with uterine agenesis or hypoplasia. Hum Reprod. 2005;20(10):2954-7.
Allen LM, Lucco KL, Brown CM, Spitzer RF, Kives S. Psychosexual and functional outcomes after creation of a neovagina with laparoscopic davydov in patients with vaginal agenesis. Fertil Steril. 2010;94(6):2272-6.