Sexual Life of Women with the Küstner-Rokitansky Syndrome

Jiří Raboch, M.D.,¹ and Jan Hořejší, M.D.²

The sexual development and sex life of 12 women with the Küstner-Rokitansky syndrome, in whom the developmental anomaly (vaginal agenesis) was corrected through surgery, were examined through structured interviews and by means of questionnaires. The comparison group was 22 women who had regular menses and a functional sex life. All differences between the groups were statistically nonsignificant. Only in one questionnaire was there a slight trend toward retarded heterosexual development in the patient sample.

KEY WORDS: Küstner-Rokitansky syndrome; artificial vagina; psychosexual adaptation; congenital anomaly; female development.

INTRODUCTION

The Küstner-Rokitansky syndrome is agenesis of the uterus and vagina as a developmental disturbance of the Müllerian ducts (Hauser and Schreiner, 1961; Jirásek, 1973). Those affected are genotypically and phenotypically women with normal ovaries (Karam et al., 1977). The external genitals are well formed and may even have a fimbriate hymen. Beyond the external genital, there is a shallow hollow, at most several millimeters deep, which does not communicate further. The consequence of the lack of the uterus is that the woman will neither menstruate nor conceive.

The sexual identity of these patients is exclusively feminine, so the impossibility of performing normal coitus due to vaginal aplasia has a dis-

¹Department of Psychiatry, Charles University, 128 21 Prague, Ke Karlovu 11, Czechoslovakia.
²Department of Gynecology, Pediatrics Faculty, Charles University, 120 00 Prague, Czechoslovakia.
Distinct influence. The situation may be solved in some cases by means of dilatations (Fordney, 1978; Ghirardini, 1980). In other cases the surgical formation of an artificial vagina by split-thickness skin graft is necessary. This method was introduced by Heppner (Edgerton et al., 1970) and was modified in Czechoslovakia by Fára, Veselý, and Kafka (1972). This surgical correction is carried out only at the time when the woman has an interest in and the possibility of a regular sex life.

The aim of our study was to describe the sexual development, sexual activity, sexual reactivity, and difficulties in psychosexual adaptation of women in whom an artificial vagina was formed in adulthood.

MATERIAL AND METHODS

Twelve patients operated on for the Küstner-Rokitansky syndrome were examined through a structured interview and by means of the following questionnaires: (1) HTDW (Heterosexual Development of Women; Mellan, 1980), which utilizes 12 items to examine the sexual development of women; the average value of this test is 32.4, with higher scores representing an acceleration and lower scores a retardation of sexual development (see Appendix I); (2) SFW (Sexual Function of Women, Mellan, 1978b), which studies, by means of 10 items, female sexual activity; average values are between 24 and 28 points, with 29 points or more reflecting elevated and under 23 reflecting lowered sexual activity (see Appendix II); (3) SAI (Sexual Arousability Inventory, Hoon et al., 1976, modified by Mellan, 1978a,b), which evaluates the degree of female sexual arousability with 20 different sexual stimuli; the average score is between 42 and 56, with a higher score reflecting increased sexual arousability; (4) Questionnaire N₅ (Engelsman, 1966), which investigates the occurrence of neurotic symptoms such as sleep disturbances, fatigue, sweatiness, irritability, and heart palpitation using 33 items; in normal individuals the value of N₅N, which expresses the frequency of neurotic symptoms and ranges from 0 to 33 points, is not higher than 11, and the value of N₅I, which reflects the degree of neurotic symptoms and varies from 0 to 99 points, is normally not higher than 12.

The average age of the patients was 23.3 years (20-28). They had the operation, on the average, 3.3 years before the examination (0.25-9). With the exception of one, all had a steady sexual partner after operation. Four were single and eight married.

The control group consisted of women with regular menstrual bleeding who did not seek medical help for disturbances in their sex life. We examined 22 such unpaid volunteers matched in age. Ten were college
students and 12 spa gynecological patients. None refused examination. The average age was 24.9 years (28-30). The average score of the questionnaires in this group was within normal limits as ascertained through examination of larger groups of women (Mellan, 1978a,b, 1980). The data were statistically evaluated by means of the $t$ test.

**RESULTS**

The average score on the individual tests is given in Tables I, II, and III. From these tables it is evident that the greater difference between women with the Kistner-Rokitansky syndrome and those of the control group is in questionnaire HTDW in the direction of retarded sexual development. However, this, with other tests investigating sexual activity, sexual arousability, and the neuroticism score, was statistically nonsignificant.

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Küstner-Rokitansky syndrome ($N = 12$)</th>
<th>Control group ($N = 22$)</th>
<th>Statistical significance ($t$ test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTDW</td>
<td>25.9 1.9</td>
<td>31.8 1.9</td>
<td>NS</td>
</tr>
<tr>
<td>SFW</td>
<td>27.4 0.9</td>
<td>27.3 0.7</td>
<td>NS</td>
</tr>
<tr>
<td>SAI</td>
<td>47.8 3.6</td>
<td>50.3 3.6</td>
<td>NS</td>
</tr>
<tr>
<td>$N_1$</td>
<td>9.7 1.7</td>
<td>11.8 1.2</td>
<td>NS</td>
</tr>
<tr>
<td>$N_2$I</td>
<td>10.8 2.2</td>
<td>13.9 1.7</td>
<td>NS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Küstner-Rokitansky syndrome ($N = 12$)</th>
<th>Control group ($N = 22$)</th>
<th>Statistical significance ($t$ test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.75 0.62</td>
<td>3.04 0.48</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>2.58 0.66</td>
<td>2.59 0.79</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>3.25 0.75</td>
<td>2.90 0.68</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>2.25 0.62</td>
<td>2.22 0.75</td>
<td>NS</td>
</tr>
<tr>
<td>5</td>
<td>2.58 0.66</td>
<td>2.81 0.39</td>
<td>NS</td>
</tr>
<tr>
<td>6</td>
<td>2.50 0.67</td>
<td>2.68 0.77</td>
<td>NS</td>
</tr>
<tr>
<td>7</td>
<td>2.75 0.62</td>
<td>2.81 0.39</td>
<td>NS</td>
</tr>
<tr>
<td>8</td>
<td>2.33 0.65</td>
<td>2.72 0.63</td>
<td>NS</td>
</tr>
<tr>
<td>9</td>
<td>2.50 0.79</td>
<td>2.54 0.67</td>
<td>NS</td>
</tr>
<tr>
<td>10</td>
<td>2.91 1.24</td>
<td>3.13 0.63</td>
<td>NS</td>
</tr>
</tbody>
</table>
Table III. Average Score on Individual Items of the HTDW Questionnaire of Patients with the Küstner-Rokitansky Syndrome and of the Control Group

<table>
<thead>
<tr>
<th>Item</th>
<th>Küstner-Rokitansky syndrome (N = 12)</th>
<th>Control group (N = 22)</th>
<th>Statistical significance (t test)</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Average score</td>
<td>SD</td>
<td>Average score</td>
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<tr>
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<td>1.46</td>
<td>2.81</td>
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<td>2</td>
<td>2.83</td>
<td>0.71</td>
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<tr>
<td>3</td>
<td>2.58</td>
<td>0.66</td>
<td>2.80</td>
</tr>
<tr>
<td>4</td>
<td>3.08</td>
<td>1.08</td>
<td>2.95</td>
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<td>5</td>
<td>2.41</td>
<td>1.37</td>
<td>3.19</td>
</tr>
<tr>
<td>6</td>
<td>2.58</td>
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<td>7</td>
<td>2.25</td>
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<td>2.71</td>
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<td>1.83</td>
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</tr>
<tr>
<td>9</td>
<td>1.66</td>
<td>0.98</td>
<td>2.95</td>
</tr>
<tr>
<td>10</td>
<td>1.50</td>
<td>1.24</td>
<td>2.00</td>
</tr>
<tr>
<td>11</td>
<td>1.41</td>
<td>0.90</td>
<td>2.22</td>
</tr>
<tr>
<td>12</td>
<td>1.66</td>
<td>1.55</td>
<td>2.13</td>
</tr>
</tbody>
</table>

Thus, there were no marked differences in values between the women with vaginal aplasia and those in the control group.

Only two patients reported masturbatory activity before operation. Both reached orgasm. The other ten attained climax for the first time after the formation of the artificial vagina during coital activity. Eleven women stated that vaginal lubrication, about 3.5 months after the beginning of their sex life, was adequate for sexual intercourse. The first coital orgasm was experienced about 3 months after the start of coitus. At the present time, 10 out of 12 patients attain sexual climax at coitus and are sexually satisfied. One patient has, during coitus, occasional pain, evidently caused by unevenness of the vagina that developed during the healing process. One woman lost her partner after operation and did not enter into a new sexual relationship.

**DISCUSSION**

Reports on the sexual life of patients with the Küstner-Rokitansky syndrome are rare and without many details (CIBA Foundation Symposium 62, 1979; Eicher, 1977; Long, 1979; Richter, 1979). Only Masters and Johnson (1967) and Woraschk and Seifert (1974) reported some objective data. Masters and Johnson examined seven women with vaginal aplasia. They found that after surgical treatment and during sexual excitation, all physical
processes were of the same character as in the normal vagina, only somewhat retarded. The other authors examined 15 patients with artificial vaginal canals. All but one were satisfied with their sex lives.

The results of our study are in agreement with the conclusions of Masters and Johnson's physiologically oriented research and with the Woraschck and Seifert clinical study. The psychosexual adaptation of the women operated on shows no serious problems. There is a trend toward slowing of heterosexual development that does not reach statistical significance.

Thus, a properly formed artificial vagina creates sufficient conditions for a satisfactory sexual life. Further, it seems that the nervous supply of the vagina plays a diminished role in the orgastic capacity of these women.

APPENDIX

Appendix I. HTDW (Heterosexual Development of Women) Questionnaire

For each item, place a circle around the choice that best reflects reality.

1. I began to take an interest in boys about the age of
   never had any 17 or later 16 15 14 13 or earlier

2. I had my first date at age
   not yet 18 or later 17 16, 15 14 13 or earlier

3. I kissed a boy for the first time at age
   not yet 18 or later 17 16, 15 14 13 or earlier

4. I was first in love at age
   not yet 18 or later 17 16, 15 14 13 or earlier

5. My first longer friendship (at least several months) was at the age of
   not yet 19 or later 18 17 16 15 or earlier

6. Altogether I have had the following number of friendships:
   none 1 2 3 4 5 or more

7. A man touched my naked breasts for the first time at age
   not yet 19 or later 18 17 16 15 or earlier

8. I allowed a man to touch my genitals for the first time at the age of
   not yet 20 or later 19, 18 17 16 15 or earlier

9. I first had coitus at age
   not yet 21 or later 20, 19 18 17 16 or earlier

10. I had coitus with a second man at age
    no coitus with one 23 22, 21, 20, 19 18 17 or earlier
    up to now man only or later

11. In all my life I had coitus with the following number of men
    none 1 2 3, 4 5, 6 7 or more

12. I married for the first time at age
    I am single 24 or later 23, 22 21, 20 19 18 or earlier

points: 0 1 2 3 4 5
Appendix II. SFW (Sexual Function of Women) Questionnaire

The person examined can choose one out of five possibilities (on a 5-point scale) in each of the 10 items—zero reflects sexual inactivity or disturbance, and 4 represents high sexual activity.

1. Need of sexual activity
2. Frequency of orgasm regardless of manner in which it occurs
3. Frequency of sexual intercourse
4. Frequency of orgasm during coitus
5. Sexual arousability
6. Harmony with partner in sexual climax
7. Mood before sexual intercourse
8. Mood after coitus
9. Self-evaluation as a sexual partner
10. Occurrence and duration of sexual disturbance, if any

REFERENCES


