Robotically assisted laparoscopic treatment of uterine anomalies

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Female genital tract malformations

- Incidence 3-7%
- 17% of those complex
- Asymptomatic; communicating
- Persistent dysmenorrhea, pelvic pain, problems with fertility, obstetrical problems
Female genital tract malformations

- Associated urological malformations
- High level of suspicion
- Careful planning
- Counseling and care!
Fetal development

Wolfian duct = mesonephric duct
Müllerian duct = paramesonephric
Age at diagnosis

- Obstructive
- Non-obstructive
- In utero?
Imaging

- MRI
- Ultrasound
- Renogram
## Surgical intervention

<table>
<thead>
<tr>
<th>Indication</th>
<th>Unnecessary</th>
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<tbody>
<tr>
<td>Pelvic pain</td>
<td>Unicornuate uterus</td>
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<tr>
<td>Repeated pregnancy loss</td>
<td>Bicornuate uterus</td>
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<tr>
<td>Prevention of endometriosis</td>
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<tr>
<td>Prevention of rudimentary horn pregnancy</td>
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</tbody>
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Robotic surgery

- Cervical dysgenensis
- Müllerian agenesis
- Accessory uterine mass
- Obstructed hemiuteri
Cervical dysgenesis

Table II

<table>
<thead>
<tr>
<th>Aetiopathogenic anomaly</th>
<th>Anatomical findings</th>
<th>Pathology name</th>
<th>Clinical symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.3. Didelphys uterus</td>
<td>Didelphys uterus</td>
<td></td>
<td>Reproductive</td>
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<td>Breech presentation</td>
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<tr>
<td>A.4. Bicornuate uterus.</td>
<td>Bicornis-bicollis uterus and</td>
<td>Bicornis-unicollis uterus</td>
<td>Reproductive</td>
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<td>Miscarriage. Breech presentation</td>
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<td></td>
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<td>Inmature delivery</td>
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<tr>
<td>A.5. Septate uterus</td>
<td>Septate and subseptate uterus</td>
<td></td>
<td>Reproductive</td>
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<td>Inmature and premature delivery</td>
</tr>
<tr>
<td>A.6. Arcuate uterus</td>
<td>Arcuate uterus</td>
<td></td>
<td>Reproductive losses?</td>
</tr>
</tbody>
</table>

B. Mullerian tubercle

B.1. Complete vaginal or cervico-vaginal agenesis or atresia

Vaginal or cervico-vaginal atresia Primary amenorrhoea Pain Cryptomenorrhea. Endometriosis

B.2. Segmentary atresias

Complete or incomplete transverse vaginal septum Dyspareunia? Obstetrical problems? Or primary amenorrhoea and cryptomenorrhea

C. Both Müllerian tubercle and ducts

Complete utero-vaginal agenesis Rokitansky or MRKH syndrome Primary amenorrhoea

4. Accessory uterine masses and other gubernaculum dysfunctions

Accessory and cavitated uterine masses with normal uterus. Pain Didelphic uterus without RA? Dysmenorrhea Tumor

5. Anomalies of the urogenital sinus


Continued

702

Padmawar A, Syed R, Naval S.

Kriplani et al
Outcomes in patients undergoing robotic reconstructive uterovaginal anastomosis of congenital cervical and vaginal atresia

Ying Zhang | Yisong Chen | Keqin Hua

Abstract

Objective: To introduce our experience of robotic surgery of reconstructive uterovaginal anastomosis and operative outcomes in congenital cervical and vaginal atresia patients.

Methods: Clinical observation and follow-up of four patients with congenital cervical and vaginal atresia who underwent robotic reconstruction of cervix and vagina by SIS (small intestinal submucosa, SIS) graft.

Results: Average patient age was 13.8 ± 2.2. Patients complained of severe periodic abdom-
Case 1
Non-communicating hemiuterus, renal agenesis and associated vascular aberrance

- 32 year old woman G0
- Increasing dysmenorrhea,
- CT scan and MRI; unconnected right hemiuteri
  Right site renal agenesis
Non-communicating hemiuterus
Case 1

Post surgery

- No dysmenorrhea
- Right ovarian torsion
- Pregnant 7+ weeks
Case 2
Rudimentary uterine horn with two non-communicating cavities

- 29 year old woman
- Gravida 2, para 2
- Uneventful pregnancies
- Vaginal deliveries with postpartum atonic bleeding
- Increasingly intense dysmenorrhea refractory to medical treatment
- Numerous emergency visits
Case 2
Rudimentary uterine horn with two non-communicating cavities

Objective

- fertility sparing surgery
- alleviation of symptoms
Two non-communicating uteri
Case 2
Rudimentary uterine horn with two non-communicating cavities

- Uneventful peri- and postoperative course
- 4 month follow-up: no dysmenorrhea, normal vaginal ultrasonography
- 7 month follow-up: 6-week intrauterine pregnancy
- Uneventful vaginal delivery

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Thank you for your attention