Reproductive surgery of female genital anomalies

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Context: The retrospective analysis of 2023 patients with various female genital malformations (between 1992 - 2014) revealed that 36% patients were infertile and 41 had pregnancy loss.

Objective: To optimize the reproductive outcomes of genital anomalies after surgical correction.

Methods: Clinical investigations included: clinical examination, karyotyping, ultrasound, MRI, laparoscopy, hysteroscopy, hormonal analysis.

Patients: The 1852 patients with normal karyotype (46,XX) had various utero-vaginal anomalies; and 171 females had disorders of sexual development (DSD).

Interventions based on clinical manifestations: obstruction of menstrual outflow, abdominal pain, infertility, miscarriage, sexual problems, endometriosis.

Creation of neovagina by peritoneal colpopoesis performed for 352 patients with utero-vaginal aplasia (MRKH syndrome).

Laparoscopic removing of rudimentary horn performed in 245 cases with unicornuate uterus. The adenomyosis detected in 56% of rudimentary horns.

Vaginoplasty performed for 240 young females with partial vaginal aplasia, hematocolpos.

Patients with incomplete intrauterine septum had pregnancy loss in 97%; with complete uterine septum had premature delivery in 50% cases before operation. Hysteroscopic dissection of uterine septum appears to acheive the succesful pregnancy in 56% (445). Neo-cervical canal with intrauterine stentation successfully created for 19 patients with cervico-vaginal aplasia. Feminizing clitoroplasty and creation of neovagina performed for 46,XY DSD patients.

Main outcome measure: Surgical correction of concomitant infertile factors performed in 52% cases: peritoneal adhesions (34%), intrauterine synechia (7%), endometriosis (23%).

Results: After surgery and adequate treatment the 57% patients with uterovaginal anomalies reached to successful pregnancy and delivery.

Conclusions: The reconstructive surgical correction, assisted reproduction methods and rehabilitation appears to improve reproductive outcomes.