Introduction. Female hypospadias (FH) is one of disorders of sex development signs (DSD). Short and wide urethra that opens into the vagina predisposes to occurrence of recurrent infection of urinary tract, vaginal voiding and postoperative narrowing of artificial vaginal introitus (AVI).

Aim. Improve the results of correction FH with stenosis AVI using reintroitoplasty separating the urinary and genital tracts in patients with DSD.

Materials and methods. Proposed method for the correction of FH in girls with DSD after primary introitoplasty is a modification of the "pull-through" vaginoplasty described by Hendren in 1969. In lithotomy position, posterior wall of the urogenital sinus (UGS) was mobilized without dissection to the level of vaginal confluence. The vagina was cut off the confluence site, mobilized from the UGS and "pulled through" to the perineum. Then the UGS defect was sutured in transverse direction. New AVI was formed from mucosa flaps, previously incised on the vestibule. Mucosa under the external UGS opening used as a Passerini-Glasell-like flap that was anastomosed with the anterior vaginal wall. Side and back new AVI walls were created from two lateral mucosa flaps of the vestibule and a special way of prepared vagina. We operated four patients with FH in combination with stenosis AVI and follow up them in seven months. The artificial meatus opens separately from the vagina with wide introitus. All patients were found of urinary continence and satisfaction of the aesthetic and functional result.

Conclusion. New method of surgical correction of female hypospadias in girls with disorders of sex development and stenosis of artificial introitus makes it possible to separate the urinary and genital tracts using UGS as the urethra, and the mucosal flaps of the vestibule for re-creation of the new AVI, and improve the results of surgical treatment of patients with DSD and female hypospadias.

Long-term results were evaluated according to the following criteria
- Female type of sexual organs
- Separate opening urethra and vagina
- Voiding with a wide jet without retention of urine
- Reduce recurrent UTI
- Satisfaction with the aesthetic and functional result
- O'Donnell-Hirshhorn test negative

All patients were found of urinary continence and satisfaction of the aesthetic and functional result.