

Laparoendoscopic Single Site Assisted Transsexual Surgery with Sigmoid Neovaginoplasty for Male Pseudohermaphroditism

Introduction and Objective: To report our initial clinical experience of laparoendoscopic single site (LESS) assisted male-to-female (MtF) genital sexual reassignment surgery (SRS) for male pseudohermaphroditism in 2 cases.

Materials and Methods: Between July and August 2010, two adolescents (17 and 16 years old) were diagnosed with male pseudohermaphroditism with perineal hypospadias and bilateral undescended testes. They were considered as girls since born because of ambiguous external genitals. Lack of menarche led to further inspection, and then chromosomes analyses confirmed to each that their genetic gender was male. But their social and psychological gender characteristics were female undoubtedly. After thorough discussion between themselves, their parents and doctors, they decided to maintain their current gender identity as girls and remove male internal genitals following vaginoplasty. After receiving the approval of local ethical committee, we performed MtF transsexual surgery with LESS assisted technique. After a 3 cm periumbilical curved incision was made, the homemade single port was inserted following resection of bilateral cryptorchidism and sigmoid vaginoplasty. Perineoplasty was performed under direct vision.

Results: LESS assisted MtF SRS were successfully performed without morbidity. Operative time for each case was 350 and 260 minutes respectively, and estimated blood loss was 200 and 100 ml respectively. Neither conversion to open or laparoscopic surgery nor blood transfusion was needed. The two patients were discharged home on postoperative day 12 and 16 respectively. The periumbilical incisions were nearly invisible 1 month postoperatively and both patients and their parents were satisfied with the good cosmetic results. Hormone therapy was under way according to endocrinologist's guidance.

Conclusions: We represented the first report of LESS assisted MtF SRS for male pseudohermaphroditism in the world. LESS assisted transsexual surgery with sigmoid neovaginoplasty was safe and feasible, and gained satisfactory cosmetic results. LESS assisted SRS might be alternative option in selected male pseudohermaphroditism patients.