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Atsushi Nagai, *Okayama University*
Eijirou Tokuyama, *Okayama University*
Yuzaburo Nanba, *Okayama University*
Tetsuya Tsutsui, *Okayama University*
Yoshihiro Kimata, *Okayama University*
Mikiya Nakatsuka, *Okayama University*
Isao Koshima, *University of Tokyo, Tokyo*
Takashi Saika, *Okayama University*
Yasutomo Nasu, *Okayama University*
Hiromi Kumon, *Okayama University*

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Atsushi Nagai, Eijirou Tokuyama, Yuzaburo Nanba, Tetsuya Tsutsui, Yoshihiro Kimata, Mikiya Nakatsuka, Isao Koshima, Takashi Saika, Yasutomo Nasu, and Hiromi Kumon

Abstract

The first case of sex reassignment surgery (SRS) in our hospital was performed in January 2001; as of February, 2005, 4 cases of MTF-SRS had been performed. In the 2 most recent cases, we used penile and scrotal skin flaps to avoid complications. The depth and width of the new vagina was made to be adequate for sexual intercourse. Future attention should be focused on devising a surgical technique that will help prevent the complications of partial necrosis of the epidermal skin and wound dehiscence. Although ours is only an initial experience, we describe our surgical technique herein.

KEYWORDS: gender identity disorder, sex reassignment surgery, male to female transsexual

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Short Communication

Sex Reassignment Surgery for Male to Female Transsexuals: Initial Experience at Okayama University Hospital

Atsushi Nagai^{a*}, Eijirou Tokuyama^b, Yuzaburo Nanba^b, Tetsuya Tsutsui^b,
Yoshihiro Kimata^b, Mikiya Nakatsuka^c, Isao Koshima^d, Takashi Saika^a,
Yasutomo Nasu^a, and Hiromi Kumon^a

^aDepartment of Urology, ^bPlastic and Reconstructive Surgery, ^cObstetrics and Gynecology,
Okayama University Graduate School of Medicine and Dentistry, Okayama 700–8558 Japan, and

^dDepartment of Plastic and Reconstructive Surgery, Graduate School of
Medicine and Faculty of Medicine, the University of Tokyo, Tokyo 113–0033, Japan

The first case of sex reassignment surgery (SRS) in our hospital was performed in January 2001; as of February, 2005, 4 cases of MTF-SRS had been performed. In the 2 most recent cases, we used penile and scrotal skin flaps to avoid complications. The depth and width of the new vagina was made to be adequate for sexual intercourse. Future attention should be focused on devising a surgical technique that will help prevent the complications of partial necrosis of the epidermal skin and wound dehiscence. Although ours is only an initial experience, we describe our surgical technique herein.

Key words: gender identity disorder, sex reassignment surgery, male to female transsexual

Sex reassignment surgery (SRS) for male to female (MTF) transsexuals is performed in many countries [1–5], but Japan is still a comparative newcomer to this field, with only a few institutes officially permitted to perform SRS. The ethical committee in our institute approved hormone replacement therapy and SRS for transsexuals in March 2000. The first case of SRS was performed in January 2001 for a MTF transsexual patient, and as of February 2005, 4 cases of MTF-SRS had been performed. All patients were referred to psychiatrists for assessment and maintained on hormones for at least 1 year prior to surgery. Our SRS technique is described herein.

The operative technique of the 2 most recent cases is

followed the sequence of bilateral orchiectomy, penectomy and plasty of vagina, clitoris, labia minora and majora. In the exaggerated lithotomy position, the skin is marked indicating the location of penile and scrotal incisions (Fig. 1A). After degloving the penis (Fig. 1B), bilateral orchiectomy is performed by dissecting the spermatic cord at the external inguinal ring. Urethra and glans penis with the intact neurovascular bundle are then freed from the corpus cavernosum. The corpus cavernosum is resected at the base of the penis. Dissection is done toward the rectum as in transperineal radical prostatectomy, with especial care taken to avoid rectal injury. Dissection is then done behind the prostate, the seminal vesicles and the bladder (Fig. 1C). Anastomosis of the apices of penile and scrotal skins is followed by suturing of the lateral edges, creating a tube for the new vagina (Fig. 1D). The new vagina is inserted into the perineal cavity and is fixed by the modified Stamey procedure as

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*Corresponding author. Phone: +81-86-235-7287; Fax: +81-86-231-3986
E-mail: atsnagai@md.okayama-u.ac.jp (A. Nagai)

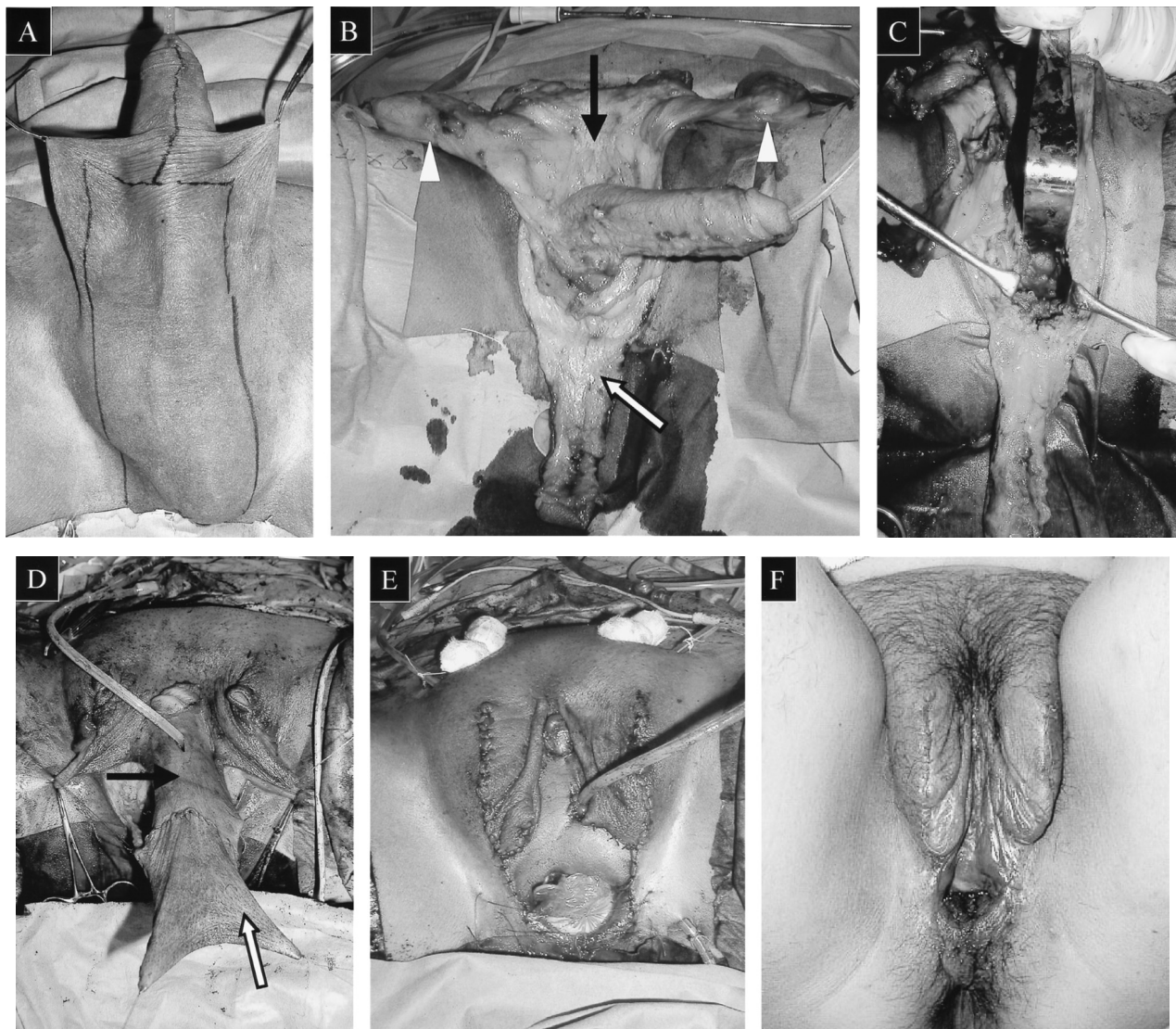


Fig. IA Skin is marked outlining the penile and scrotal incisions.
Fig. IB Penis is completely degloved. Penile skin flap (black arrow), scrotal skin flap (white arrow), and testes (white arrow heads).
Fig. IC Seminal vesicles and bladder seen through the recto-urethral space.
Fig. ID The apices of the penile (black arrow) and scrotal skin (white arrow) are anastomosed.
Fig. IE Urethral meatus, clitoris, labia majora and minora are formed.
Fig. IF 3 weeks after surgery.

described by Perović [1]. An opening is made in the inverted penile skin and the stump of the urethra is everted and sutured onto this opening, forming the new urethral meatus. A clitoris is formed after trimming of the dorsal half of the glans. Labia majora and minora are formed and excessive scrotal skin is excised (Fig. 1E, F).

We made major changes in the surgical procedure between the first 2 cases and the 2 most recent cases of MTF-SRS. In the first 2 cases, we used penile and perineal skin flaps for vaginoplasty. The main disadvantage was the shortening of the vaginal tube due to stenosis, after surgery. In the 2 most recent cases, we used penile and wide scrotal skin flaps to prevent these complications. The depth of the new vaginas is 9 to 10 cm and the width is 4 to 5 cm. In the 2 most recent cases, however, partial necrosis of the epidermal tissue of the scrotal skin flap in 1 case and wound dehiscence in the other case occurred. These complications must be

prevented in the future by an improvement in the surgical technique that will preserve adequate blood flow to the new genitalia.

Although ours is an initial experience, the patients were satisfied with the final outcome of the procedure.

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