Microsurgery for male infertility : simplifying procedures

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Microsurgical reconstruction offers a possibility of cure for a subset of men with obstructive azoospermia. Men with a previous vasectomy or a vaso–epididymal junction obstruction have normal testicular spermatogenesis and bypassing the site of obstruction can result in a return of sperm to the ejaculate and restored fertility. However, the extremely small caliber of the epididymal tubules and the vasa deferens make it difficult to perform an ideal anastomotic procedure that is watertight with precise mucosal approximation. The use of an operating microscope is essential for achieving optimum outcomes. Even with the use of a microscope, most of these procedures require advanced technical skills and are often considered very difficult.

The classical approach to microsurgical vasoepididyomostomy required a two-layered multiple suture anastomosis between the epididymal tubule and the vasa. This was modified into a two-suture intussusception technique by Marmar in 2000. We have further modified this technique into a two-suture longitudinal intussusception vasoepididyomostomy to make it simpler. This has resulted in reasonably good patency rates even in cases with idiopathic obstruction and no previously documented fertility. For vasectomy reversal, the microdot technique described by Goldstein requires the placement of 24 sutures in three layers. We have modified this technique into a two-layered 4x4 anastomosis that has excellent short-term outcomes. In this presentation, our technique of these surgeries will be demonstrated through videos and we will present our results.

The effects of a 12-week combined exercise intervention following radical prostatectomy in elderly patients with prostate cancer: a prospective, randomized controlled study

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Introduction: We examined changes in the quality of life due to the effects on a postoperative recovery of physical function and the mental health following the application of combined exercise intervention after radical prostatectomy in elderly patients with prostate cancer. Patients and methods: The current study was conducted in 49 patients who underwent radical prostatectomy for the management of localized prostate cancer. Of elderly patients aged 65 years or older, those who fully understood exercise intervention and then submitted a written informed consent were enrolled in the current study. Patients who presented adjuvant or neoadjuvant therapy, severe complications, a past history of pelvic cavity or restrictions in exercise interventions were excluded from the current analysis. Of patients of the exercise group, two patients were dropped out because of transferal of place of residence and new occupation. A total of 47 patients (exercise group; \(n = 24\), control group; \(n = 23\)) were therefore enrolled in the current study. Types of exercise include resistance exercise, pelvic flexibility exercise and Kegel exercise. These exercises were mainly performed by sports experts with the use of a ball and an elastic band. In the control group, only Kegel exercise was performed. Following a 12-week exercise intervention, the physical functions were assessed based on functional fitness, flexibility and balance function. The body composition was also measured using a body composition analyzer (Inbody 720, Biospace Co. Korea). Urinary incontinence and voiding symptoms were evaluated using a pad test and an ICQ questionnaire. Besides, for the assessment of depression and quality of life, a Beck's depression inventory (BDI) and an SF-36 questionnaire were used. The measurement was performed preoperatively (visit 0), on the first visit following exercise intervention (on postoperative week 3; visit 1) and on the final visit (on postoperative week 15; visit 2).

Results: Following a 12-week exercise intervention, except for grip strength, all the physical functions were more excellent in the exercise group as compared with the control group. However, there was no significant difference in the body composition between the two groups. On a questionnaire study using BDI and SF-36, the exercise group showed excellent outcomes. A pad test and an ICQ questionnaire also showed that voiding symptoms were also recovered more promptly in the exercise group.

Conclusions: A 12-week combined exercise intervention following radical prostatectomy was effective in making a recovery of the physical functions and mental health. This might also contribute to achieving a prompt recovery of daily lives.