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## Rehabilitation for severe delayed ejaculation (intravaginal ejaculation disorder) with use of a masturbation aid

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### ABSTRACT

**Objective:** To overcome intravaginal ejaculation disorder with the help of a masturbation aid (TENGA®). **Methods:** A total of 10 patients with intravaginal ejaculation disorder underwent rehabilitation using TENGA. Patients' satisfaction, achievement of intravaginal ejaculation and pregnancy were evaluated through a questionnaire. **Results:** Seven of the patients (70%) achieved ejaculation in the masturbation aid (TENGA) of which two patients (20%) succeeded in ejaculation within a partner's vagina after rehabilitation. One case achieved spontaneous pregnancy. **Conclusions:** The use of a masturbation aid (TENGA) has shown to be a useful tool in correcting the methods of masturbation and achieve normal intravaginal ejaculation, and could be an effective option for the treatment of intravaginal ejaculation disorder.

## 1. Introduction

In Japan, there has been an increase among sufferers of sexual dysfunction of those who cannot ejaculate inside a vagina. It is a common request from patients of male infertility treatment to request treatment of intravaginal ejaculation disorder. In the area of ejaculation dysfunction within Japan, intravaginal ejaculation disorder is more common than premature ejaculation. Those suffering from intravaginal ejaculation disorder are unable to ejaculate inside the vagina of a woman, although most are able to ejaculate through masturbation.

Patients suffering from ejaculation disorders have increased rapidly in recent years in our hospital. These disorders include premature ejaculation, retrograde ejaculation, primary ejaculation disorder and those who

cannot ejaculate within a vagina but are able to reach ejaculation through masturbation. Patients who have practiced unusual masturbation methods for a prolonged period of time from their adolescence found it difficult to achieve intravaginal ejaculation through behavior therapy methods used to treat erectile dysfunction. We have therefore proposed the use of a masturbation aid (TENGA®) for the rehabilitation of this condition.

## 2. Materials and methods

Our institutional ethics committee reviewed and approved the study protocol. A total 36 patients who wish for baby were diagnosed with some kind of ejaculation dysfunction between January 2010 and January 2011 at Dokkyo Medical University Koshigaya Hospital. Of these patients, 10 patients (27.8%) suffering from intravaginal ejaculation disorder have taken part in this clinical study. These patients are able to ejaculate through masturbation but are unable to ejaculate inside of a vagina due to a long history of unusual methods of masturbation since adolescence.

We investigated the medical history of the patients, their

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method of assisted reproductive technology (ART) and their method of masturbation. To evaluate sexual dysfunction, the international index of erectile function 5 (IIEF5) was used as a questionnaire study<sup>1)</sup>. For each patient, hormonal evaluation included measurement of plasma serum follicle stimulating hormone (FSH), luteinizing hormone (LH) and testosterone. The chromosome of these patients was also investigated. We made sure to receive informed consent from all patients regarding this method of rehabilitation.

We counseled the patients and taught correct methods of masturbation to all patients after confirming problems regarding ejaculation disorder within a vagina. The methods were 1) not to press (apply forced pressure to) the penis, 2) not to grip the penis tightly and 3) to ejaculate from stimulation of a piston action applied to the penis, in a relaxed posture. In addition to the above, masturbation at home during rehabilitation was to be done with the use of a masturbation aid (TENGA®)

TENGA is a Japanese brand of male masturbation aid made from Thermoplastic Elastomer (a silicone like substance) that the user inserts their penis in to for stimulation (Figure 1).



**Figure 1.** Masturbation aid: TENGA®.

Patients insert their penis in this device when they do masturbation.

### 3. Results

Thirty six patients presented symptoms of some kind of ejaculation disorder at this hospital. Of which, three suffered from premature ejaculation, twelve suffered from retrograde ejaculation, seven were those with psychogenic causes, four had never experienced ejaculation, two patients suffered neurologic diseases such as diffuse myelitis, and ten patients were those who were unable to ejaculate within a vagina although they could achieve ejaculation through masturbation.

The masturbation methods of those patients with intravaginal ejaculation disorder broke down as follows: four patients applied pressure by pressing their penis against a wall or floor, three patients held their penis with too strong a grip, and three patients who masturbated while stretching their feet with strength in their legs in bed. As a result of having investigated IIEF5, we did not find any of these patients to suffer from erectile dysfunction. Eight (80%) of the ten intravaginal ejaculation disorder patients wished to achieve natural fertilization. None showed diseases that cause ejaculation disorder such as retroperitoneal lymph node dissection in their medical histories. One couple whose main concern wasn't to achieve fertilization had already had children through artificial insemination by the husband's sperm (AIH). Four patients presented low levels of LH and one patient had a high level of FSH found through an endocrine examination. However, the testosterone levels of all patients were shown to be normal, and the chromosome branding of all cases were 46XY (Table 1).

Seven of the ten patients (70%) who had had a long history of unusual methods of masturbation have become able to ejaculate with the use of a masturbation aid and were able to correct their method of masturbation. Two of the patients (20%) were able to ejaculate in their partner's vagina (Table 1). The success of the rehabilitation of ejaculation took three to nine months after commencement of rehabilitation. Among the eight cases who wished to achieve fertilization, one case achieved spontaneous pregnancy. Six of the patients underwent AIH and one patient underwent intracytoplasmic sperm injection (ICSI).

**Table 1**

Base line and results of the patients of intravaginal ejaculatory disorder.

No.	Hope of fertility	Age	LH (mIU/mL)	FSH (mIU/mL)	T (ng/mL)	Method of masturbation	Ejaculation with TENGA	ART	Ejaculation in vagina
1	Yes	40	3.1	3.4	2.83	stretching feet	Yes	AIH	No
2	Yes	36	3.6	5.2	4.91	press	Yes	AIH	No
3	Yes	37	0.8	3.7	4.60	stretching feet	Yes	AIH	No
4	No	33	2.4	7.2	5.40	stretching feet	No		No
5	Yes	36	5.6	12.9	5.31	press	No	AIH	No
6	No	34	3.4	3.8	3.33	strong grip	Yes		No
7	Yes	29	2.6	2.4	4.85	press		ICSI	No
8	Yes	35	1.4	1.6	2.92	strong grip	Yes	AIH	Yes
9	Yes	35	2.5	5.5	3.85	strong grip	Yes		Yes (Spontaneous pregnancy)
10	Yes	31	3.3	4.6	5.33	press	Yes	AIH	No

#### 4. Discussion

There are many patients whom suffer from ejaculation dysfunction who we treat for male infertility, and it is common to see patients who suffer from ejaculation disorders such as this to suffer from intravaginal ejaculation disorder. The causes of this fall largely into two groups – psychogenic causes and inappropriate methods of achieving stimulation for masturbation. For examples of those with psychogenic causes, there are cases that occur during and due to the guidance of timed intercourse for pregnancy, as well as cases where the patient can only ejaculate when alone, or have a specific and unusual subject for sexual arousal. However, we have treated more patients who have come under intravaginal ejaculation disorder through inappropriate methods of stimulation (incorrect masturbation methods) than those with psychogenic causes. Incorrect methods of masturbation include stimulation methods such as rubbing penis on bed sheets and floors, applying pressure to penis between thighs, or applying too much grip to their penis. As such, it is necessary to teach correct methods of masturbation as treatment for these patients.

However, those patients who have a long history of unusual methods of masturbation are often unable to gain intravaginal ejaculation through behavior therapy. Among the many reports of ejaculation disorder, there are many on premature ejaculation, but very little literature on intravaginal ejaculation disorder[2–5]. The neuropathy due to diabetes or retroperitoneal lymphatic node dissection is noted as a cause of ejaculation disorder in infertility treatment, but the problem of masturbation practices as a cause of this is not mentioned at present[6].

The following methods are commonly recommended as a guide to correcting methods of masturbation to achieve intravaginal ejaculation; 1) A piston action (an up-and-down movement of the hand) with tender grip of the hand, 2) systematic desensitization with cooperation of a partner, 3) AIH for couples wishing to achieve fertilization. However, there are no current reports proposing the use of a masturbation aid as a method of rehabilitation.

TENGA® marketed in Japan is a widely known masturbation aid, and is recently seen being used as a device to treat ejaculation disorder. The advantage of using TENGA® (CUP Series products (TENGA herein) for rehabilitation regarding intravaginal ejaculation disorder are 1) patients are unable to tightly grip the penis due to the TENGA product being hard-cased, applying a constant grip pressure, 2) TENGA is able to provide stimulations varying from strong to weak stimulation through three different product types (hard, regular and soft), 3) TENGA is hygienic due to being a disposable product. It is important to teach these patients the normal methods of masturbation, and the TENGA masturbation aids have provided a simple solution to this method of rehabilitation. As a result, cases have proven that the patients have become able to achieve ejaculation within a vagina.

However, there are many complicated causes of

intravaginal ejaculation disorder; decreases in sexual desire, sexual aversion, various subjects of arousal, etc. Such complicated cases require behavior therapy and counseling. After the rehabilitation period, seven of the ten patients who took part in the trial were able to revise their method of masturbation, but perhaps due to the short time frame of the trial, only two were able to fully achieve ejaculation within a vagina. Therefore, we recommended assisted reproductive technology such as AIH or ICSI for those who wished the achieve fertilization. However, when we consider that there was a couple who wished to treat intravaginal ejaculation disorder but did not wish to achieve fertility, it was suggested that the trouble of intravaginal ejaculation disorder is not settled simply through the ability to have children.

The investigated cases were only patients who had visited our hospital for male infertility treatment, but it is suspected that there are potentially many more cases of people suffering from intravaginal ejaculation disorder. It may even be thought that education of proper methods of masturbation should be taught in future sex education. The TENGA® masturbation aids have proven as a useful tool to teach proper masturbation methods during rehabilitation. However, only a few patients saw definite results in terms of intravaginal ejaculation, and it was necessary to push forward with treatment with counseling or assisted reproductive technology after the time span of the experiment.

#### Conflict of interest statement

The authors declare that they have no conflict of interest.

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