CURRENT DEFINITION AND TREATMENT OF PREMATURE EJACULATION

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Summary.- OBJECTIVES: To discuss a concept about the current definition and treatment of premature ejaculation.

METHODS: A detailed review was performed on the current definition and treatment of premature ejaculation.

RESULTS: Several definitions were found, however a consensus on how to define premature ejaculation is lacking. In addition, there are several treatments: daily, on demand and topical agents.

CONCLUSIONS: Premature ejaculation implicated three specific characteristics: short intravaginal ejaculatory latency time, lack of control, and sexual dissatisfaction.

Keywords: Premature ejaculation. Treatment. Fertility. Sexuality.

Resumen.- OBJETIVO: Discutir el concepto sobre la definición actual y el tratamiento de la eyaculación precoz.

MÉTODOS: Se realizó una evaluación detallada de la actual definición y tratamiento de la eyaculación precoz.

RESULTADOS: Se encontraron varias definiciones, sin embargo no hay un consenso sobre cómo definir la eyaculación precoz. Adicionalmente, existen varios tratamientos: diario, sobre demanda y agentes tópicos.

CONCLUSIONES: La eyaculación precoz implica tres características específicas: corto tiempo de latencia eyaculatoria intravaginal, falta de control, e insatisfacción sexual.


INTRODUCTION

The ejaculatory process is mainly mediated by the autonomic nervous system and consists of two main phases: emission and expulsion of semen (1). The human ejaculate varies considerably in volume between individuals but is usually between 2 and 6 millilitres in volume. The seminal vesicles produce around 40-80% of the total ejaculatory volume, > 2 mL according to the reference value in the 1999 WHO Manual (2). The prostatic contribution to semen is around 10-30% of the total ejaculatory volume. Bulbo urethral and urethral glands also secrete a small amount of mucus that forms around 2-5% of the total ejaculatory volume.
**Premature Ejaculation**

During the evolution of human sexuality, the ability to control the timing of ejaculation has become one of the most important features of a couple’s sexual health. For this reason, lack of ejaculatory control has a profound psychorelational basis, and its treatment is amenable to male and/or couple psychotherapy. Ejaculatory dysfunction, especially premature ejaculation (PE) is one of the most common sexual complaints of adult men (3-4) and men with PE report lower levels of sexual satisfaction than men with normal ejaculation.

PE, or inadequate ejaculatory control, is the inability to exert voluntary control over the ejaculatory reflex, so that once a man reaches a certain level of sexual arousal or excitement, he ejaculates reflexively and rapidly soon after or even before vaginal penetration. Because ejaculation in patients who have PE usually occurs intravaginally, however, it rarely causes infertility. If ejaculation occurs before penetration, however, couples can perform home-based intravaginal insemination to circumvent the fertility problem.

There is no universally accepted definition for premature ejaculation. In addition, there are no validated screening instruments specific for this dysfunction. For that reason, a consensus on how to define PE is lacking. Therefore, several definitions exist, for example:

1) **American Urological Association:** “ejaculation that occurs sooner than desired, either before or shortly after penetration, causing distress to either or both partners” (5).

2) **International Consultant on Sexual Dysfunction:** “Ejaculation with minimal stimulation and earlier than desired, before or soon after penetration, which causes bother or distress, and over which the sufferer has little or no voluntary control” (6-7).

3) **American Psychiatric Association’s Diagnostic and Statistical Manual, 4th edition (DSM-IV-TR):** “persistent or recurrent ejaculation with minimal stimulation before or shortly after penetration, and before the person wished it” (6-7).

4) **World Health Organization:** “an inability to delay ejaculation sufficiently to enjoy lovemaking, manifest as either of the following: a) occurrence of ejaculation before or very soon after the beginning of intercourse (if a time limit is required: before or within 15 seconds of the beginning of intercourse); and b) ejaculation occurs in the absence of sufficient erection to make intercourse possible”. In addition, the WHO definition excludes men whose PE is due to alcohol, substance abuse or medications, low frequency of sexual activity (8).

5) **International Society for Sexual Medicine:** during 2007, responding to the variability of world wide definitions and the need for a universal standard, the International Society for Sexual Medicine (ISSM) established an ad hoc committee consisting of 21 international recognized experts to establish a new definition of PE, and these clinical and basic experts concluded that, “premature ejaculation is a male sexual dysfunction characterized by ejaculation which always or nearly always occurs prior to or within about one minute of vaginal penetration; and inability to delay ejaculation on all or nearly all vaginal penetrations; and negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy” (9).

In summary the PE implicated three specific characteristics: short intravaginal ejaculatory latency time (IELT), lack of control, and sexual dissatisfaction.

**Treatment for Premature Ejaculation**

The treatment of PE has encompassed psychological, behavioral, and pharmacologic interventions:

a) **selective serotonin reuptake inhibitor (SSRI):** Increases the extracellular level of the neurotransmitter serotonin by inhibiting its reuptake into the presynaptic cell, increasing the level of serotonin available to bind to the postsynaptic receptor. SSRIs encompass 5 compounds: paroxetine, fluoxetine, sertraline, citalopram and fluvoxamine. Daily treatment with 20-40 mg of paroxetine, increases IELT around 8.8 fold compared to placebo (10).

b) **Clomipramine:** A tricyclic antidepressant, is a strong, but not completely SSRI, as the primary active metabolite desmethylclomipramine acts preferably as a norepinephrine reuptake inhibitor. Administration of clomipramine, 4 to 6 hours before intercourse is efficacious and well tolerated, but is associated with less ejaculatory delay than daily treatment. It is important to mention that daily administration of an SSRI is associated with the best increase in IELT compared with administration several hours before intercourse (10).

c) **Dapoxetine:** A short-acting SSRI that is currently under development for treating PE, has a unique pharmacokinetic profile that allows for a relatively rapid achievement of high serum concentrations and rapid
elimination after oral dosing, which might contribute to its utility as an on demand therapy for PE. Hellstrom WJ, et al., showed that dapoxetine administered 1 to 2 hours prior to planned intercourse increased the IELT compared to placebo in almost 1 min (11).

d) Tramadol: A centrally acting synthetic opioid analgesic that is available in generic form in most countries, might be effective for the on-demand treatment of PE. Safarinejad MR et al., (12) and Salem EA et al., (13) reported in patients with PE, that on demand use 2 hours before intercourse increased IELT.

e) Topical agents: Topical local anesthetics such as lidocaine or prilocaine formulations as a cream, gel or spray effectively cause desensitization, and have been shown to increase the mean IELT. In addition, an Asian topical agent is applied to the glans penis 1 h before sexual intercourse and has been shown in controlled, double-blind studies to delay ejaculatory latency and improve sexual satisfaction. However, mild local pain and burning were noted side effects (14-15).

REFERENCES AND RECOMMENDED READINGS
(*of special interest, **of outstanding interest)