Ejaculation

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Lectures

- Master lecture 1 - Delayed ejaculation/Anorgasmia
  - Emmanuele Jannini (Italy)

- Taxonomy of ejaculatory disorders
  - EMISSION PHASE DISORDERS:
    - Retrograde ejaculation
  
  - EJACULATION PHASE DISORDERS:
    - Premature ejaculation
    - Deficient ejaculation:
      - Delayed ejaculation
      - Anejaculation
  
  - ORGASM DISORDERS:
    - Anorgasmia
    - Postorgasmic illness syndrome

Ejaculatory disorders: epidemiology and current approaches to definition, classification and subtyping

Emmanuele A. Jannini (©) · Andrea Lenzi
DSM-V: Definition

A. Either of the following symptoms must be experienced on almost all or all occasions (approximately 75%-100%) of partnered sexual activity (in identified situational contexts or, if generalized, in all contexts), and without the individual desiring delay:
- 1. Marked delay in ejaculation.
- 2. Marked infrequency or absence of ejaculation.

B. The symptoms in Criterion A have persisted for a minimum duration of approximately 6 months.

C. The symptoms in Criterion A cause clinically significant distress in the individual.

D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substance/medication or another medical condition.
Classification - Specify whether:

- **Lifelong**: The disturbance has been present since the individual became sexually active.

- **Acquired**: The disturbance began after a period of relatively normal sexual function.

- **Generalized**: Not limited to certain types of stimulation, situations, or partners.

- **Situational**: Only occurs with certain types of stimulation, situations, or partners.
Classification - Specify current severity:

- **Mild**: Evidence of mild distress over the symptoms in Criterion A.

- **Moderate**: Evidence of moderate distress over the symptoms in Criterion A.

- **Severe**: Evidence of severe or extreme distress over the symptoms in Criterion A.
Master lecture 1 - Delayed ejaculation/Anorgasmia

- Prevalence is unclear
- DE is reported at low rates in the literature, rarely exceeding 3%
- Limited normative data for defining the duration of “normal” ejaculatory latency, particularly regarding the right “tail” of the IELT distribution (i.e., beyond the mean latency to orgasm)
- Epidemiologic studies have not distinguished delayed ejaculation vs. anejaculation
Etiologies and risk factors of deficient ejaculation

**NON-ORGANIC**
- Repressive sexual education
- Sexual abuse in childhood
- Deep psychological conflicts

**ORGANIC**
- Spinal cord injury
- Retroperitoneal lymph node dissection
- Diabetes mellitus
- Transverse myelitis
- Multiple sclerosis
- Neuroleptic drugs
The Hormonal Control of Ejaculation

**Figure 4** The hormonal regulation of the ejaculatory continuum.
**DE Therapy**

- **Aims**
  1. To cure the disease (i.e. hypothyroidism).
  2. To cure the couple.
  3. To eliminate the symptom.
  4. To create a “positive memory” of sexual success.

- **Behavioral Therapy**

- **Medications (not recommended)**
  - Alpha 1 adrenergic receptor agonists
  - Cyproheptadine
  - Amantadine
  - Yohimbine
  - Buspirone
  - Apomorphine
  - Quinelorane
  - Oxytocin
  - Reboxetine
  - Midocrine
Disorders of Orgasm and Ejaculation in Men

David Rowland, PhD,* Chris G. McMahon, MBBS, FACHSHM,† Carmita Abdo, MD,‡ Juza Chen, MD,§ Emmanuele Jannini, MD,*† Marcel D. Waldinger, MD, PhD,** and Tai Young Ahn, MD††

Lectures

- Instructional course 1 – Basic Sexual Therapy for Physicians

Sex Therapy Approaches to the Treatment of Ejaculatory Disorders

- Stanley Althof (USA)

“Present day psychotherapy for PE is an integration of psychodynamic, behavioral, cognitive and systems approaches within a short-term psychotherapy model”
Sex Therapy Approaches to the Treatment of Ejaculatory Disorders

Psychotherapy Harnesses the Power of the Mind to Teach Men a Set of Skills

1. Learn techniques to control and delay ejaculation
2. (Re)gain confidence in their sexual performance
3. Lessen performance anxiety
4. Modify rigid sexual repertoires
5. Surmount barriers to intimacy
6. Resolve interpersonal issues (that cause/maintain PE)
7. Come to terms with interfering feelings and thoughts
8. Increase communication
9. Turn conflict and useless friction into intimacy, fantasy and stimulation
10. Minimize or prevent relapse

Sex Therapy Approaches to the Treatment of Ejaculatory Disorders

- Factors that Contribute to Successful Treatment Outcome
  - Quality of couple’s general relationship,
  - Motivation of the partners
  - Absence of serious psychiatric disorder
  - Physical attraction between partners
  - Early compliance with the treatment

Hawton K et al. *Arch Sex Behav* 1992, 21: 161-175
Limitations of Psychotherapy for PE

- Lack immediacy
  - (Therapy takes time to be effective)
- Efficacy
  - (Good initially - Tends to diminish over time)
- More difficult to treat men not in stable relation
  - (Having a motivated and supportive partner is helpful)
- Time consuming and costly
Sex Therapy Approaches to Treatment of Ejaculatory Disorders

- Combination therapy leads to:
  - Increased efficacy of the medical intervention
  - Increased treatment satisfaction
  - Decreased rates of discontinuation
  - Increased relationship satisfaction

- Combination therapy is superior to pharmacotherapy alone on either IELT and/or the PROs

Lectures

- Instructional course 4 – Premature ejaculation: Update on management
  - **Etiology and Diagnosis**
    - Ege Can Serefoglu (Turkey)
  - **Psychological Treatment**
    - Stanley Althof (USA)
  - **Pharma Treatment**
    - Chris McMahon (Australia)
**Etiology and Diagnosis of PE**

**ISSM definition of lifelong and acquired PE**

1. Ejaculation which always or nearly always occurs before or within **about 1 minute** of vaginal penetration from the first sexual experiences (**lifelong PE**), or,

   a clinically significant and bothersome reduction in latency time, often to **about 3 minutes** or less (**acquired PE**), and;

2. Inability to delay ejaculation on **all or nearly all** vaginal penetrations, and;

3. Negative personal consequences, such as **distress**, bother, frustration and/or the avoidance of sexual intimacy

The Four PE Syndromes

**Lifelong**
- Very short IELT
- Neurobiological
  - Genetic
- Medication
- Low prevalence

**Acquired**
- (Very) short IELT
- Medical/Psychological
  - Medication
  - Psychotherapy
- Low prevalence

**Variable**
- Normal IELT
- Normal variation
- Reassurance
- High prevalence

**Subjective**
- Normal/long IELT
- Psychological
- Psychotherapy
- High prevalence

Etiology of PE

Psychogenic

Medication

Hormonal

Urologic

Neurologic
Diagnosis of PE

PATIENT/PARTNER HISTORY
- Establish presenting complaint
- Intravaginal ejaculatory latency time
- Perceived degree of ejaculatory control
- Degree of patient/partner distress
- Onset and duration of PE
- Psychosocial history
- Medical history
- Physical examination

SUBJECTIVE PE

NO

VARIABLE PE

TREATMENT
- Reassurance
- Education
- Psychotherapy
- Behavioral Therapy

PREMATURE EJACULATION

PE SECONDARY TO ED OR OTHER SEXUAL DYSFUNCTION

YES

MANAGE PRIMARY CAUSE

NO

ACQUIRED PE

TREATMENT
- Behavioral/Psychotherapy
- Pharmacotherapy
- Combination treatment

PATIENT PREFERENCE

LIFELONG PE

TREATMENT
- Pharmacotherapy
- Behavioral/Psychotherapy
- Combination treatment

ATTEMPT GRADUATED WITHDRAWAL OF DRUG THERAPY WHEN APPROPRIATE

Althof S et al J Sex Med 2014
Pharmacotherapy for PE

Neurotransmitters involved in ejaculation:
- Serotonin (5-HT)
- Dopamine (DA)
- Oxytocin
- Gamma-aminobutyric acid (GABA)
- Noradrenaline

- Serotonin is the key inhibitory neurotransmitter involved in ejaculation
Pharmacological Treatment

- Over the past 20-30 years, the PE treatment paradigm has expanded to include drug treatment

- Level 1A evidence to support the efficacy & safety of off-label daily and on-demand SSRIs
  - Paroxetine, sertraline, citalopram, fluoxetine
  - Serotonergic tricyclic, clomipramine
  - Dapoxetine

- Paroxetine exerts the strongest ejaculation delay (mean IELT fold increase of 8.8)

1. ICSD Paris 2009

**Effect of SSRIs on Ejaculation**

- Green: Sertraline
- Yellow: Sertraline then placebo
- Red: Placebo then sertraline

IELT (min)

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Dapoxetine

- First compound specifically developed for the treatment of PE
- Dapoxetine is a fast-acting, short half-life selective serotonin reuptake inhibitor (SSRI)
- Level 1A evidence to support the efficacy and safety of on-demand dosing of dapoxetine (ICSD 2009)
DA-8031

- Potent SSRI (Dong-A ST, Korea)
- Oral & intravenous DA-8031 significantly inhibited ejaculation in PCA-mediated ejaculation rat model
- Dose-dependent increase in ejaculation latency time with statistical significance at 30 and 100 mg/kg dosage levels compared with the vehicle ($P < 0.05$)
- PK studies showed blood concentration peaked at $0.38 \pm 0.14$ h after oral administration, and then rapidly declined with a half-life of $1.79 \pm 0.32$ h.
- DA-8031 is a potential therapeutic agent in the treatment of PE.

Tramadol

- Tramadol is an oral centrally acting opioid analgesic indicated for the treatment of moderate to severe pain.
- The efficacy of on-demand tramadol in the treatment of PE.

- Tramadol’s mode of action is unclear.
  - Binds to μ-opioid receptors.
  - Weak serotonin, GABA and norepinephrine re-uptake inhibitor.
“On-Demand” Topical Anesthetics

- Lidocaine, lidocaine/prilocaine (EMLA), TEMPE® spray, Promescent® Spray
- Few controlled studies
- Moderately effective in delaying ejaculation [1-3]
- Potential risk of penile hypo-anaesthesia, transvaginal absorption, resulting in vaginal numbness and resultant female anorgasmia
- Level 1A evidence to support the efficacy and safety of on-demand topical anaesthetics in the treatment of PE
THANK YOU