Disorders of Ejaculation and Orgasm in Men

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BASHH Sexual Dysfunction Masterclass
November 2018

Objectives
- By the end of the session you should hopefully be able to:
  - Appreciate the range of ejaculatory and orgasmic disorders in men
  - With respect to delayed ejaculation
    - Develop a personal approach to the assessment process
    - Understand the possible treatment modalities
  - Review the challenges associated with retrograde ejaculation
(Remember we won’t be talking much about premature ejaculation today)

‘Normal’ Ejaculatory Function
- This is the process whereby seminal fluids are ejected from the urethral meatus
- 3 stage process
  - Sympathetic control
    1. Emission – glandular fluid deposited in posterior urethra
    2. Contraction of urethral sphincter to prevent retrograde ejaculation
  - Peripheral nerve control (pudendal nerve)
    3. Ejaculation proper (propulsion)

Neurotransmitters involved in ejaculation
- Serotonin, dopamine, gamma amino butyric acid and noradrenaline are all involved in the processing of emission and ejaculation
- 5-HT (serotonin) the key neurotransmitter involved in the processing of ejaculation
- 5-HT<sub>2C</sub> activation – delays ejaculation
- 5-HT<sub>1A</sub> activation – accelerates ejaculation


The Spectrum of Male Ejaculatory & Orgasmic Dysfunction

Ejaculation v. Orgasm
- Ejaculation is the mechanical process of semen expulsion
- Typically, orgasm refers to the pleasurable physical sensations experienced at the same time ejaculation occurs
- Ejaculation and orgasm usually occur simultaneously in men, even though they are two separate phenomena
  - Not all men who experience orgasm will ejaculate
  - Not all men who ejaculate will experience orgasm
- So if problems occur the clinical picture can be quite variable
Timing Disorders

- Premature ejaculation
- Delayed ejaculation
- Involuntary or spontaneous ejaculation
  - Pollination
  - Spermatorrhoea

Volume Disorders

- Hypospermia (<1.5 ml)
- Aspermia (no fluid)
  - *true anejaculation* – lack of any semen (antegrade or retrograde ejaculate) with preservation of orgasm
    - aspermia = no semen with ejaculation
    - azospermia = no sperm with semen
- Considered differing grades of same condition
- Dry ejaculation / Anejaculation
- Retrograde Ejaculation

Sensation-Related Disorders

- Painful Ejaculation
- Dysorgasmia
- Hypohedonic ejaculation
- Anhedonic ejaculation
- Asthenic ejaculation
- Anorgasmia
- Post Orgasm Illness Syndrome

Ejaculate Content Disorders

- Haematospermia
- Climacturia

Classification Systems

- DSM-5 2013 (APA)
  - psychiatry.org/psychiatrists/practice/dsm
- ICD 11 2018 (WHO)
  - icd.who.int/browse11/l-m/en
- ICSM 2015
  - McCabe et al JSM 2016;13:135-141
- EAU
  - uroweb.org/guideline/male-sexual-dysfunction/
  - Recent guideline updates only include PE

DSM 5

- Delayed ejaculation
- Premature (early) ejaculation
ICD 11

- HA03 Ejaculatory dysfunctions
  - Ejaculatory dysfunctions refer to difficulties with ejaculation in men, including ejaculatory latencies that are experienced as too short (Male early ejaculation) or too long (Male delayed ejaculation).

- HA40 Aetiological considerations in sexual dysfunctions and sexual pain disorders
  - 0 medical condition, injury, or the effects of surgery or radiation treatment
  - 1 psychological or behavioral factors, including mental disorders
  - 2 use of psychoactive substance or medication
  - 3 lack of knowledge or experience
  - 4 relationship factors
  - 5 with cultural factors

International Consultation on Sexual Medicine 2015 - Ejaculation

<table>
<thead>
<tr>
<th>Sexual Dysfunction</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Delayed Ejaculation (Primary)</td>
<td>A lifelong experience of inability to ejaculate in all or almost all occasions of coital activity (causes distress)</td>
</tr>
<tr>
<td>Delayed Ejaculation (Acquired)</td>
<td>A distressing lengthening of ejaculatory latency that occurs in most coital experiences after a period of normal ejaculatory function. Voluntary cessation of coital activity subsequently occurs after a variable period to avoid further distress.</td>
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<tr>
<td>Retrograde Ejaculation</td>
<td>Ejaculation of seminal fluid into the bladder because of bladder neck dysfunction in the presence of otherwise normal emission and expulsion.</td>
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<tr>
<td>Anorgasmia</td>
<td>The absence of normal antegrade ejaculation during orgasm owing to the absence of the emission and expulsion phases of the ejaculation reflex</td>
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<tr>
<td>Anhedonic Ejaculation</td>
<td>Ejaculation without the pleasurable sensation of orgasm</td>
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International Consultation on Sexual Medicine 2015 - Orgasm

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<tr>
<td>Anorgasmia</td>
<td>The inability to reach orgasm despite adequate and prolonged sexual stimulation leading to adequate sexual arousal. Might or might not lead to personal distress.</td>
</tr>
<tr>
<td>Hypoerotic Orgasm</td>
<td>Lifelong or acquired decreased or low level of sexual pleasure with orgasm.</td>
</tr>
<tr>
<td>Painful Ejaculation or Orgasm</td>
<td>The occurrence of genital and/or pelvic pain during or shortly after ejaculation or orgasm.</td>
</tr>
<tr>
<td>Post Orgasmic Illness Syndrome</td>
<td>Flulike incapacitating physical and mental symptoms occurring within a few minutes to a few hours after an ejaculation, which usually last 3 to 7 days.</td>
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Today we will focus on:

- Delayed ejaculation
- Retrograde ejaculation

What’s in a Name?

- Anejaculation
- Anorgasmia
- Delayed ejaculation
- Ejaculatory incompetence
- Inhibited ejaculation
- Inhibited orgasm
- Late ejaculation
- Male orgasmic disorder
- Retarded ejaculation

All these terms have all been used to describe a delay or absence of male orgasmic response. The preferred terminology delayed ejaculation is meant to describe any and all of the ejaculatory disorders resulting in a delay or absence of ejaculation.
What is normal?

Unselected ‘normal’ population of 500 heterosexual couples
Stopwatch timing of the intravaginal ejaculatory latency time (IELT) in the general population

[Graph showing distribution of IELT with a median of 5.4 minutes, n = 491]

Operational Criteria for Ejaculatory Timing

- Mean IELT = 5.4 minutes
- Statistical principle of ±2 standard deviations from the mean is abnormal:
  - IELT cut off for PE = 1 minute
  - IELT cut off for DE = approximately 22 minutes
- Diagnosis of Delayed ejaculation usually applied to those with IELT beyond 25-30 minutes who report distress or men who simply cease sexual activity due to exhaustion or irritation. 

Delayed Ejaculation

**DSM 5**

A. Either of the following symptoms must be experienced on almost all or all occasions of partnered sexual activity (in identified situational contexts or, if generalised, 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

Prevalence of DE

- Very little data
- Rates vary from 1% to 10%
- Prevalence of DE & anejaculation probably much higher in elderly men but many are no longer sexual active therefore do not present to clinicians and are not distressed by the situation

Delayed Ejaculation

**DSM 5**

- Specify whether:
  - Lifelong
  - Acquired
  - Generalised
  - Situational
- Specify current severity:
  - Mild
  - Moderate
  - Severe

David is a 44 year old accountant. He met his current partner Linda 1 year ago through mutual friends. They have been in a sexual relationship for 6 months. They live separately but are looking into buying a house together soon. They see each other several times a week, usually staying over at Linda's house.

Since they started a sexual relationship, David has never ejaculated during vaginal intercourse. At first he put it down to nerves, then for a short period was pleased in his ability to continue having sex for over 30 minutes at a time. Linda asked him if there was something wrong with her, whether he didn’t find her attractive or if she was doing something wrong. Since then David has focussed on trying to ejaculate during vaginal sex but to no avail.

He describes no erection difficulties and considers himself to have a “healthy” sexual desire.

He is physically fit and active, though he has been on an antidepressant (citalopram) since his relationship with his ex-wife ended 18 months ago.

He has never smoked and rarely drinks alcohol.

He is generally an optimistic person but worried this relationship will end because of the sexual situation before it’s really got off the ground. Also, work pressures seem to be mounting, which is making more demands on his time.
Delayed Ejaculation

Assessment – Salient points in history

- Distress
- Ejaculatory potential (Lifelong or Acquired / Global or Situational)
- During sleep
- Masturbation
- Partner stimulation – hand, mouth, anus and sexual positions
- Changes in ejaculatory function – progressive, volume, sensation
- Other sexual function: frequency, desire, arousal, erection, orgasm, satisfaction
- Chronology and course of problem
- Significant life events
- Drugs, illness, trauma, life stressors
- Masturbatory techniques and frequency
- Fantasies
- Cultural, religious and perceived societal views
- Factors that improve or worsen the problem
- Medical and surgical hx and medications
- Dyad assessment
- Reproductive intentions

Delayed Ejaculation

Examination

- Examination often inconclusive
- Genital exam
- Endocrinopathy
- Neurological assessment

Delayed Ejaculation

Assessment – Investigations

- Blood tests
  - Glucose
  - Hormonal profile
- Urine analysis post orgasm
- Imaging / Specialist neurological and urological investigation
  - USS / MRI
  - PSA
  - Fertility investigations
  - Electrophysiological evaluation

Delayed Ejaculation

Organic Causes

- Congenital
  - Mullerian duct obstruction
- Trauma
  - Prostate and abdominopelvic surgery / radiotherapy
- Disease
  - Endocrine
    - Severe hyperandrogenism, hypothyroidism
  - Neurological
    - MS, diabetic neuropathy, spinal cord injury
    - Alcohol neuropathy
  - Genitourinary
- Ageing

Delayed Ejaculation

Organic Causes - Medication

- Antidepressants
  - SSRIs
  - TCAs
  - MAOIs
- Antipsychotics
- Opioids
- Benzodiazepines
- Alpha antagonists
- etc


McMahon et al. JSM 2013;10:204-229
Sadowski et al SMR 2016;4:137-176
Psychogenic Delayed Ejaculation

• Variability is the hallmark of psychogenic delayed ejaculation

• Situational context
  • Ejaculation may occur during masturbation or nocturnal emission but not with a partner
  • Ejaculation may occur during foreplay or manual stimulation, for example, but not during vaginal intercourse

DE – ‘Psychogenic’ Aetiologies

• Numerous theories have been proposed but none have empirical evidence base

1. Insufficient stimulation

2. Masturbatory style and idiosyncrasies

3. Psychic conflict

4. Linked to a disorder or problem with sexual desire

Alhood IJIR 2012;24:131-136

Insufficient stimulation

• Failure to achieve sufficient mental or physical stimulation
  • Early treatment methodologies focused on increasing sensation
    - Masters and Johnson (“Treatment of the Incompetent Ejaculator”)
    - Bancroft
  • Can be attributed to age-related changes or reduced penile sensation
    - “insensate penis”
  • Men with DE experience less self reported sexual arousal than men with no sexual dysfunction (Rowland et al)
  • Psychological issues are strongly suggested when men report having intact penile sensation while masturburating, yet have diminished sensation when being stimulated by their partner

Masters and Johnson, Human Sexual Inadequacy
Bancroft: Human Sexuality and its Problems
Rowland et al IJIR 2004;16:270-271

Masturbatory style and idiosyncrasies

• Consider the following 3 factors which appear to be associated with DE:
  • Frequency of masturbation (>3 times a week)
  • Idiosyncratic masturbatory style / Traumatic Masturbatory Syndrome
  • Disparity between reality (of sex with partner) and fantasy (during masturbation)
  • May lead to inhibition of sexual arousal and inability to reach ejaculatory threshold

Sank JSMT 1998; 24:37-42
Lipsith et al. SRT; 18(4); 447-471
Perelman EFS & ESSM Syllabus of Clinical Sexology 2013:683

Psychic conflict

• Related to e.g. fear, anxiety and hostility
  • Loss of self from loss of semen
  • Harm from female genitals
  • Causing partner pain
  • Pregnancy
  • Defiling partner
  • Religious / cultural upbringing and belief systems
  • Such issues may wholly account for the problem in some individuals

Linked to a disorder or problem with sexual desire

• Autosensual orientation – i.e. solo-sex / masturbatory orientation rather than partner focused (Apfelbaum)
  • How could anyone do it (masturbate) better than me, after all I have been doing it for years

• Overconcern for partner and (ejaculatory) performance anxiety
  • Can be accompanied by a compulsion to satisfy the partner and attention drawn away from erotic cues and sexual stimulating sensations
  • ‘Automatic erections’
  • In the presence of a partner, the DE’s penis is relatively insensate or numb because it is out of phase with his level of erotic arousal.

• Paraphilic tendency

Apfelbaum Principles and practice of sex therapy
Delayed Ejaculation
Treatment Principles

- Treatment should be aimed at any identified aetiology
- Could include:
  - Patient / couple psychoeducation and/or psychosexual therapy
  - Pharmacotherapy
  - Combination of above
- Consider any reproductive and fertility issues
- Reduce dose or discontinue any medication which may cause DE (if safe to do so) and consider alternatives
- Optimise treatment for concomitant ED

McMahon et al. 2013;10:204-229

Pharmacotherapy for Delayed Ejaculation

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<thead>
<tr>
<th>Drug</th>
<th>As Needed</th>
<th>Daily</th>
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<tbody>
<tr>
<td>Amantadine</td>
<td>100-400mg (for two days prior)</td>
<td>75-100mg bd or tds</td>
</tr>
<tr>
<td>Bupropion</td>
<td>150-600mg</td>
<td>15-150mg bd</td>
</tr>
<tr>
<td>Cyproheptadine</td>
<td>4-12mg (1-4 hours prior)</td>
<td>-</td>
</tr>
<tr>
<td>Pseudoephedrine</td>
<td>60-120mg (1-2 hours prior)</td>
<td>-</td>
</tr>
<tr>
<td>Reboxetine</td>
<td>4-8mg</td>
<td>-</td>
</tr>
<tr>
<td>Yohimbine</td>
<td>1-4mg tds</td>
<td>-</td>
</tr>
<tr>
<td>Oxytocin</td>
<td>24H intranasal intracutal</td>
<td>-</td>
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No medications are licensed to treat DE. There are no large scale studies and use is observational, experimental, limited or anecdotal.

McMahon et al. 2013;10:204-229

Delayed Ejaculation
Psychological Interventions & Strategies

- Backbone of treatment in most cases
- There is no single universal approach
- Therapeutic programme is developed based on assessment of individual and couple relationship etc

McMahon et al. 2013;10:204-229

Psychological Interventions & Strategies
First steps

- Destigmatise condition / Permit anger, confusion, frustration, misunderstanding
- Normalise, reassure, information giving
- Psychosexual education
- Reduced goal focussed anxiety
- Increase / enhance genital stimulation
- Vibration devices (PVS), erotica, explore sexual positions & movements

McMahon et al. 2013;10:204-229

Althof IJIR 2012;24:131-136

Vibration

STOP DELAYED EJACULATION
ONE MAN’S JOURNEY FROM TOTAL FRUSTRATION TO A HAPPY AND HEALTHY SEX LIFE

Jack Parker

Ben Fields
Psychological Interventions & Strategies
Further steps (time and training dependent)
- Masturbatory retraining
- Exploratory or prescribed
- Aim is to learn or rediscover pleasurable sensations which provide more intense sexual stimulation / arousal and transfer these skills into a partnered sexual experience
- Realign sexual fantasies with reality (can be difficult!)
- Dyadic interventions
- Communication work
- Sensate focus
- Psychodynamic work
- CBT programmes

The importance of male ejaculation for female sexual satisfaction
- Swiss study 2015
- 240 heterosexual women aged 20 – 60
- How important is it for you that your partner ejaculates during a sexual encounter?
  - 50% - very important
- Do you perceive the quantity of the expelled ejaculate as an expression of your own sexual attractiveness?
  - 13% agreed

The importance of male ejaculation for gay couple sexual satisfaction
- Very little literature on the prevalence, impact, assessment and management modalities for gay men with ejaculatory disorders
- For MSM, much value given to ejaculation as part of sexual play - sensory experience of viewing and handling the semen is strongly eroticised – sexual pleasurable and a ‘proof of maleness’

Retrograde Ejaculation
- Retrograde ejaculation involves a particular pattern of anejaculation with preserved orgasm.
- Bladder neck lacks resistance to the high pressure during ejaculation leading to redirection of semen into the bladder

Retrograde Ejaculation – Aetiology
- Anatomical disorders of bladder neck anatomy
- Neurological disease (mainly autonomic neuropathies)
  - MS
  - Spinal Cord injuries
  - DM – up to a third can describe difficulties in ejaculation
- Surgical procedures
  - Bladder neck / prostate procedures
  - Retroperitoneal surgery (can affect sympathetic ANS)
- Medication

1 Gianotten and Aars ICST 2018; 5(4):1-6
2 Burri et al. JSM 2018; epub
3 Fedder et al Andrology 2013;1:602-606
Retrograde Ejaculation – Drug Causes

- Alpha blockers eg tamsulosin
- 5alpha reducatase inhibitors – esp in combination (finasteride / dutasteride)
- Sympatholytics eg reserpine, guanethidine, methylidopa, clonidine
  (anti-adrenergic activity interferes with closure of bladder neck)
- Antipsychotics esp thioridazine
- Antidepressants

1 Roehrborn et al. J Urol 2008; 179:616-621

Retrograde Ejaculation Diagnosis

- Always consider in a man with aspermia or hypospermia (semen volume <1.5ml)
- Diagnosis confirmed with post-ejaculation urine analysis

Retrograde Ejaculation Management

- Discontinue (if possible) any contributing drugs
- Medication – alpha agonist activity
  - Pseudoephedrine 30mg OD / 30-60mg pre-ejaculation
  - Imipramine 25 - 50mg OD
  - Buspirone
  - More effective if RE due to nerve damage
    - DM, SCI, MS etc.
- Collagen injection of bladder neck
- Sperm retrieval methods if fertility issues

1 Ahn et al JSM 2018;15:S1-593