Anejaculation

Webinar

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- Bhatia Hospital
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Inability to ejaculate besides causing infertility, can be very frustrating for a man, his partner & their doctor

ERECTION

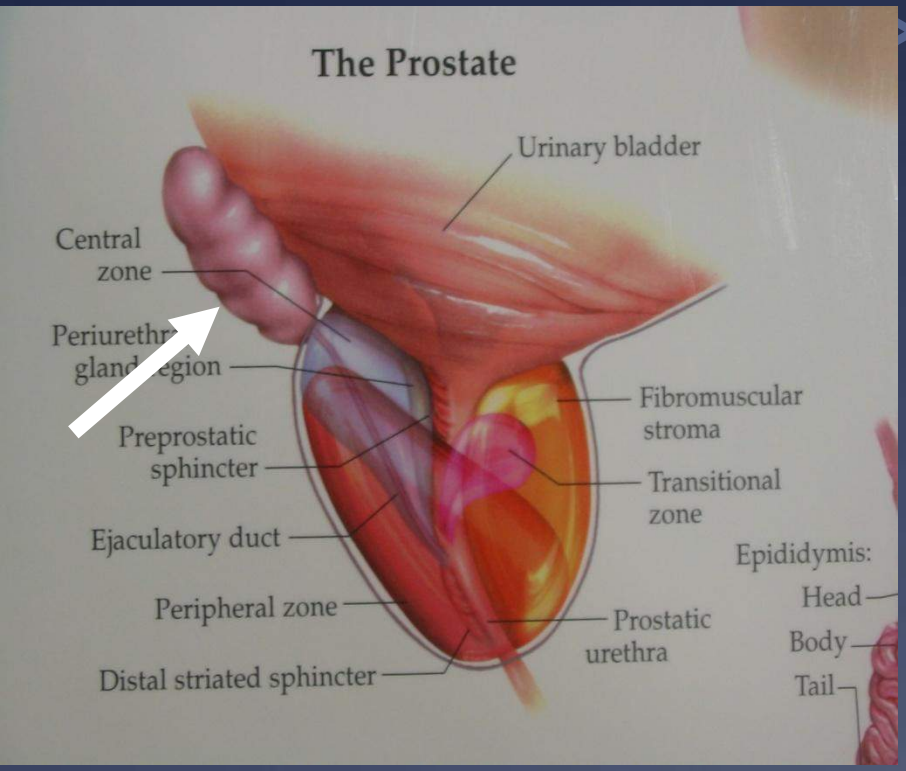
ORGASM

EJACULATION

Ejaculatory Reflex

- Sympathetic Stimulation leading to
- Contraction of S.Vescicles, Vasa
- Emission
- Closure of Bladder neck
- Distention of Posterior Urethra
- Peri-Urethral Muscle Contractions leading to Antegrade Expulsion out of the external urethral meatus

Three phases of ejaculation



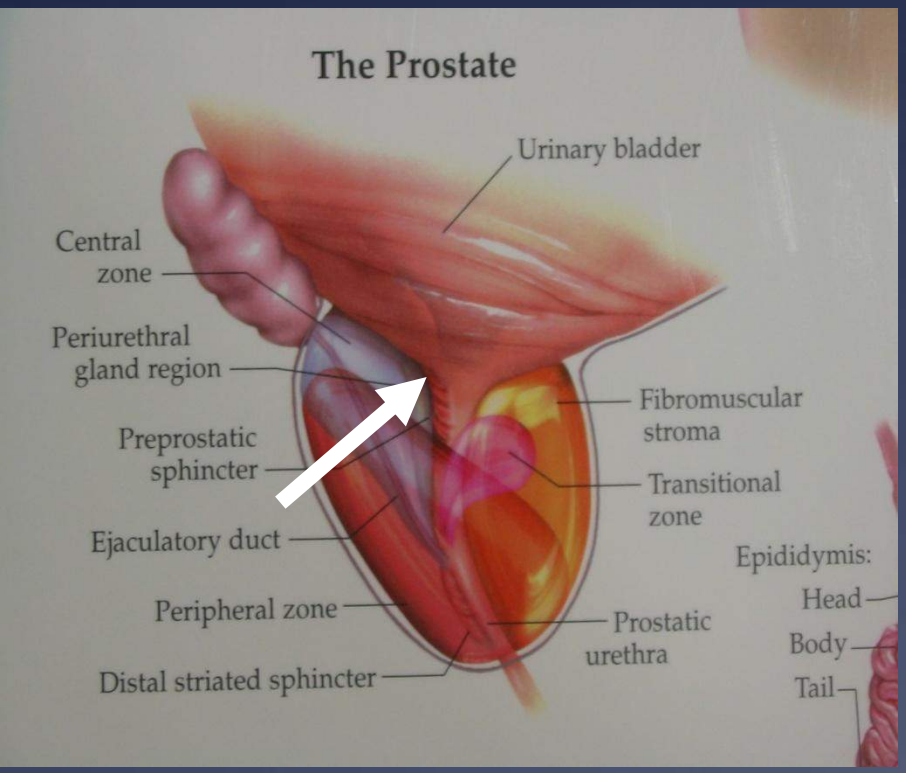
* **Phase -1: Emission**

S.V. and vas contract depositing sperm in posterior urethra.

Symp. Innervation

T10 – L2 through Hypogastric plexus

Three phases of ejaculation



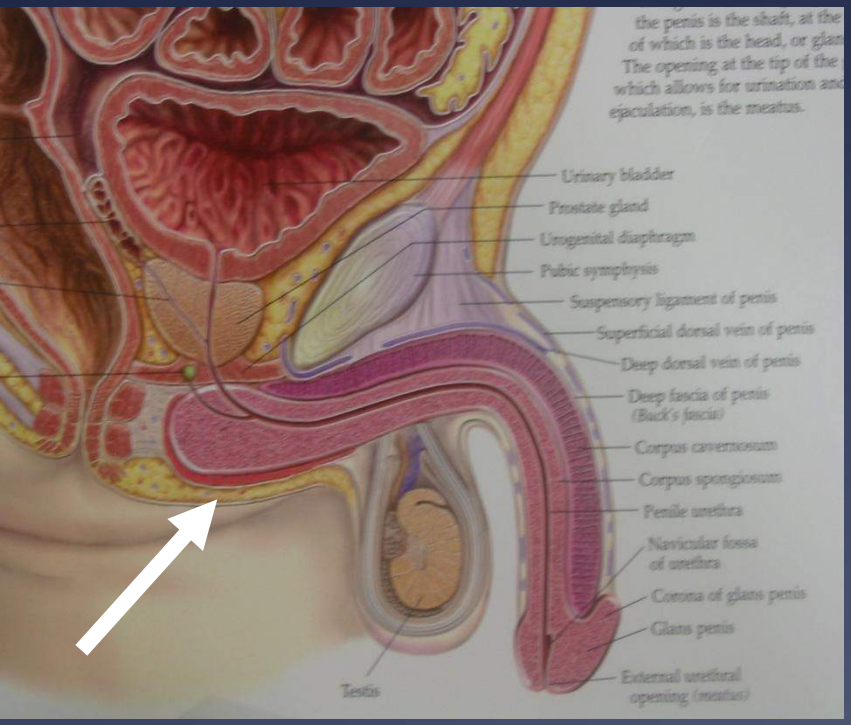
- **Phase -2: Closure of bladder neck**

  Prevents retrograde ejaculation,

  Controlled via

  Sympathetic fibres originating T10-L2

Three phases of ejaculation



- **Phase -3:**

  Antegrade propulsion

  By rhythmic contractions of BCM

  -Perineal Branch of Pudendal nerve S2-S4

Failure to ejaculate

* Climax disorder
  - does not reach orgasm
* Phase-1 disorder
  - failure of emission
* Phase-2 disorder
  - retrograde ejaculation
* Phase-3 disorder
  - failure of antegrade propulsion

Types of Anejaculation

- Situational Anejaculation
- Total Anejaculation

Types of anejaculation

- **Situational Anejaculation:-** can consciously ejaculate in some situations

- **Total Anejaculation:**
  - never ejaculates during intercourse or masturbation but nocturnal emissions are present

Total Anejaculation

- Due to physical causes
- Psycho-physiological causes

Total Anejaculation

* **Due to physical causes**

- reaches orgasm, but no ejaculate

occurs due to anatomical block or neurological problem.

This is **ORGASMIC ANEJACULATION**

Total anejaculation

* **Due to Psycho-physiological causes**
  - does not reach orgasm, so no ejaculation

This is called -

Anorgasmic Anejaculation

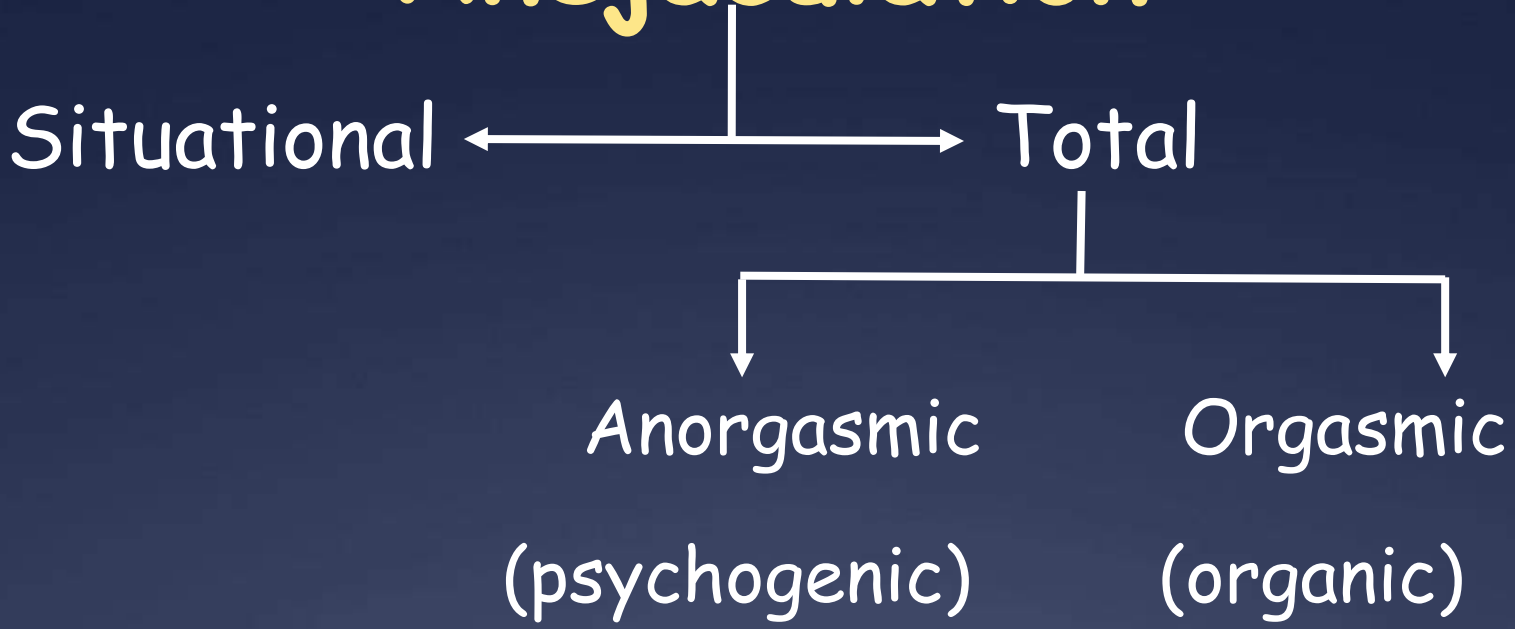
Anejaculation

Do you ejaculate in some situations?

Anejaculation

Do you ejaculate in some situations?

Anejaculation



Do you reach an orgasm?

Anejaculation

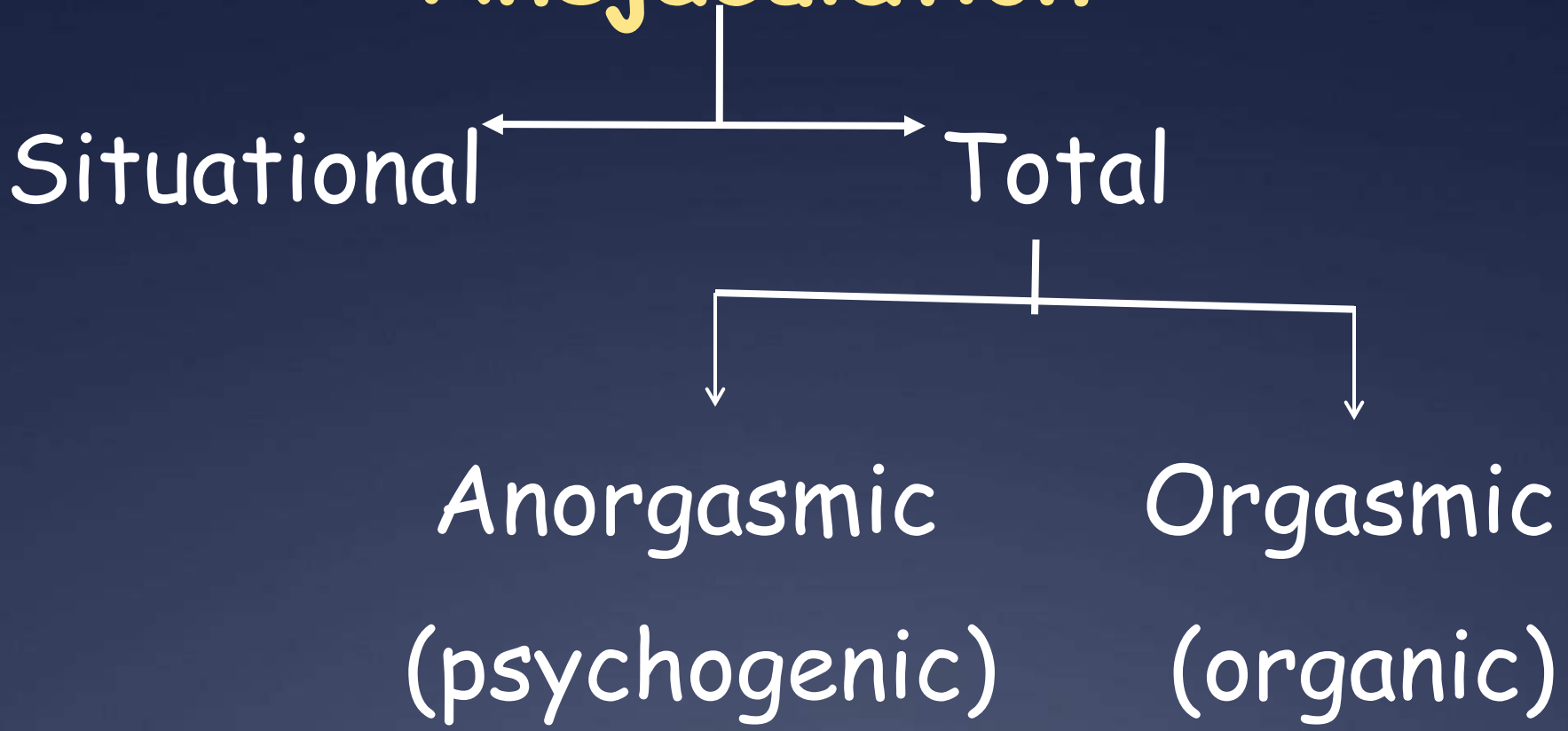
Do you reach an orgasm?

Total Anejaculation

" Do you reach orgasm?"

- "No"
- "Maybe"
- "I don't know"

Anejaculation



Do you have night emissions?

Pseudo-ejaculation

Difficulty in collecting semen, gives:

* **Urethral secretions**
  - low volume, fructose negative
* **Urine**
  - yellow coloured "semen"

It is not semen, Hence obviously Azoospermic

Treatment of situational Anej.

- Unexpected failure
- Periovulatory
- Clinic anejaculation
- Masturbatory anejaculation
- Intercourse anejaculation

Unexpected failure to ejaculate

- Prior cryopreservation
- Home collection, prior to pick-up
- Vibrator
- Electro ejaculation
- TESA (not PESA)

Peri-Ovulatory / On-Demand Anejaculation

- Pre-ovulatory cryopreservation
- Erectogenic drugs
  - Intra-penile injection/sildenafil
- Vibrator-induced ejaculation
  - Advance training preferable
- Electro ejaculation

Clinic / Lab Anejaculation

- Home collection
- Arrange room near clinic
- Vibrator-induced ejaculation
- in-clinic advance training mandatory

Inability to masturbate

* Coitus interruptus
* Non-spermicidal condom
* Vibrator-induced ejaculation

Always enquire about ability to masturbate when asking for SA

Intercourse Anejaculation

- Psychosexual therapy
  correct technique ; use of fantasy ; resolution of trauma, guilt, conflict
- Therapy for erectile dysfunction
- AIH with masturbatory sample

Treatment of Total Anejaculation

- Anorgasmic Anejaculation
- Orgasmic Anejaculation

Anorgasmic Anejaculation

Never reaches orgasm,

hence never ejaculates

Unusual problem, often misdiagnosed

Anorgasmic Anejaculation

Psychosexual / Physiological

1. Previous psycho-sexual trauma
2. Low sexual arousal
3. Inadequate sexual stimulation
4. High ejaculatory threshold

Treatment of Anorgasmic Anejac.

* Psycho-sexual therapy
  - establishes normal orgasm & ejac.
  - slow progress; low success rate
* Artificial stimulation
  - immediate success
  - temporary solution

For majority, fertility is the sole concern

Vibrator therapy for Anejaculation

Principle

Prolonged stimulation of the glans with a high amplitude vibrations will reach the ejaculatory threshold and induce orgasm and ejaculation

Vibrator therapy for Anejaculation

Technique: Preparatory counseling

- Explain physiology
- Alleviate anxiety / inhibitions
- Automatic event / reflex

"Not under your control"

"You can not wish it"

Vibrator therapy for Anejaculation

Technique

- Privacy
- Sits comfortably
- Stimulate undersurface of glans
- Fantasy / Erotic pics
- Stimulate up to 1 hour
- Up to 4 sessions

Inexpensive Vibrators

Vibration therapy for Anejaculation

Follow-up

If ejaculates with the vibrator:

* vibrator for home use
* IUI with vibrator sample
* vibrator-primed intercourse
* some will achieve natural ejaculation

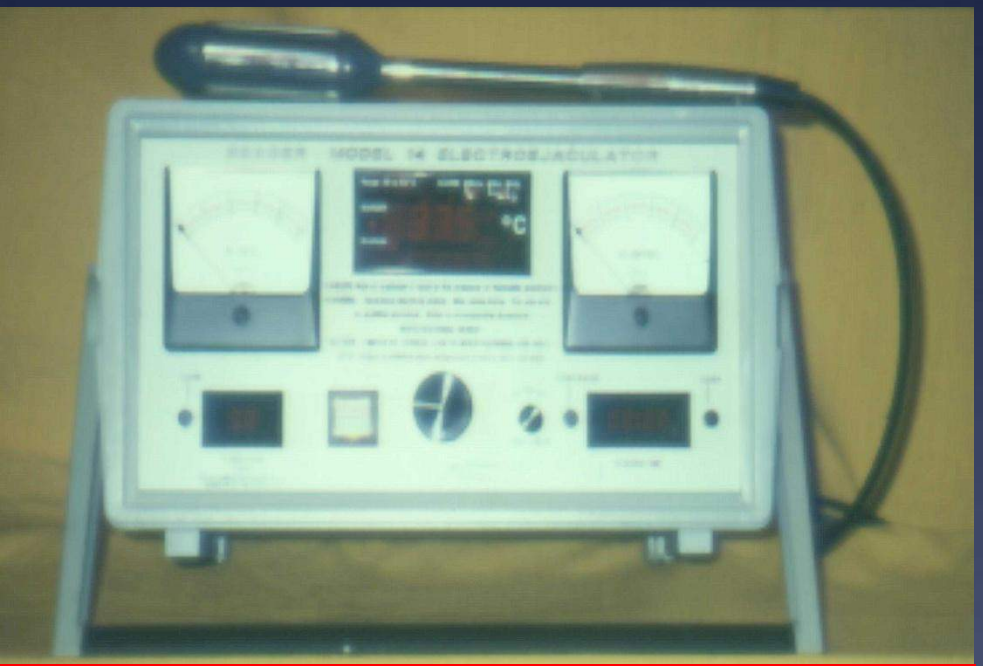
Treatment of Anorgasmic Anejaculation

If vibrator fails,

Then the next step is

Electro-ejaculation

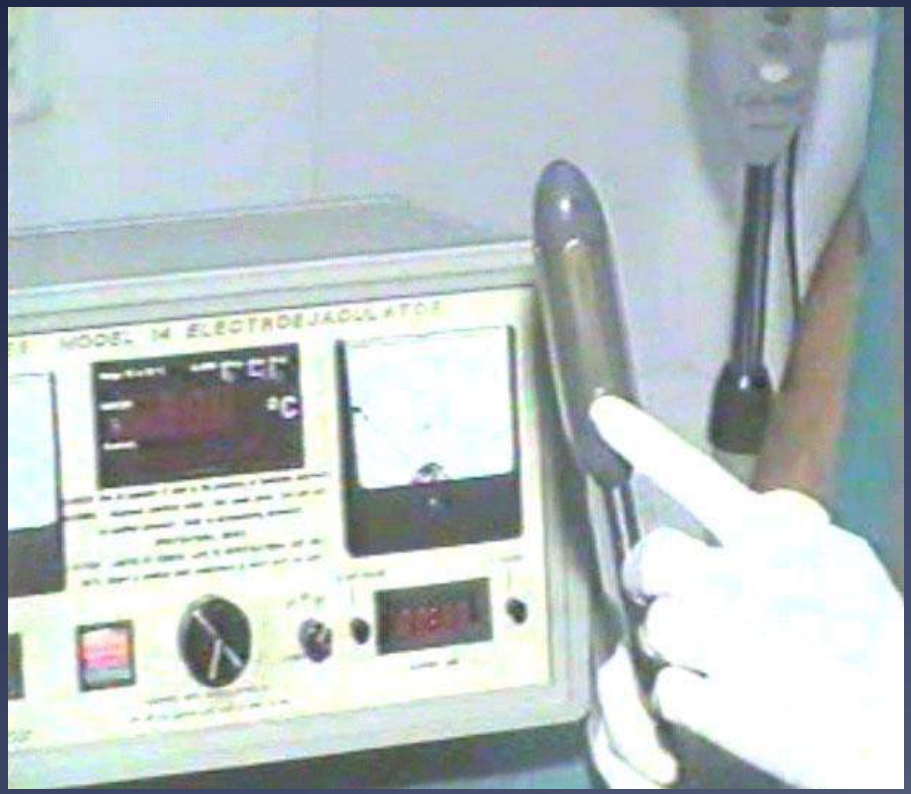
Electro-Ejaculation

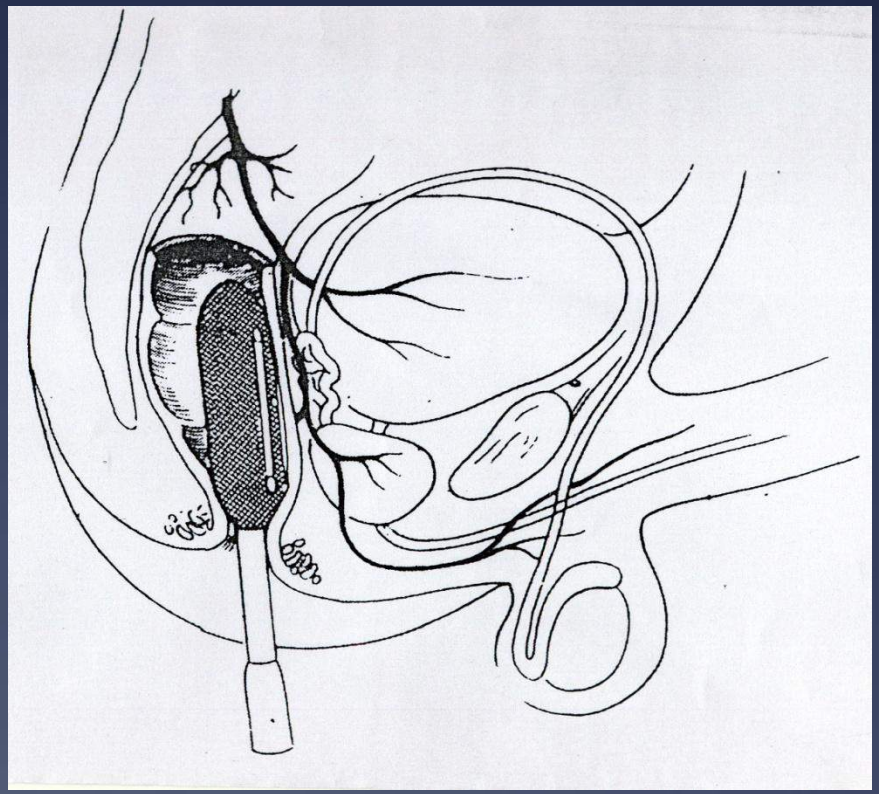


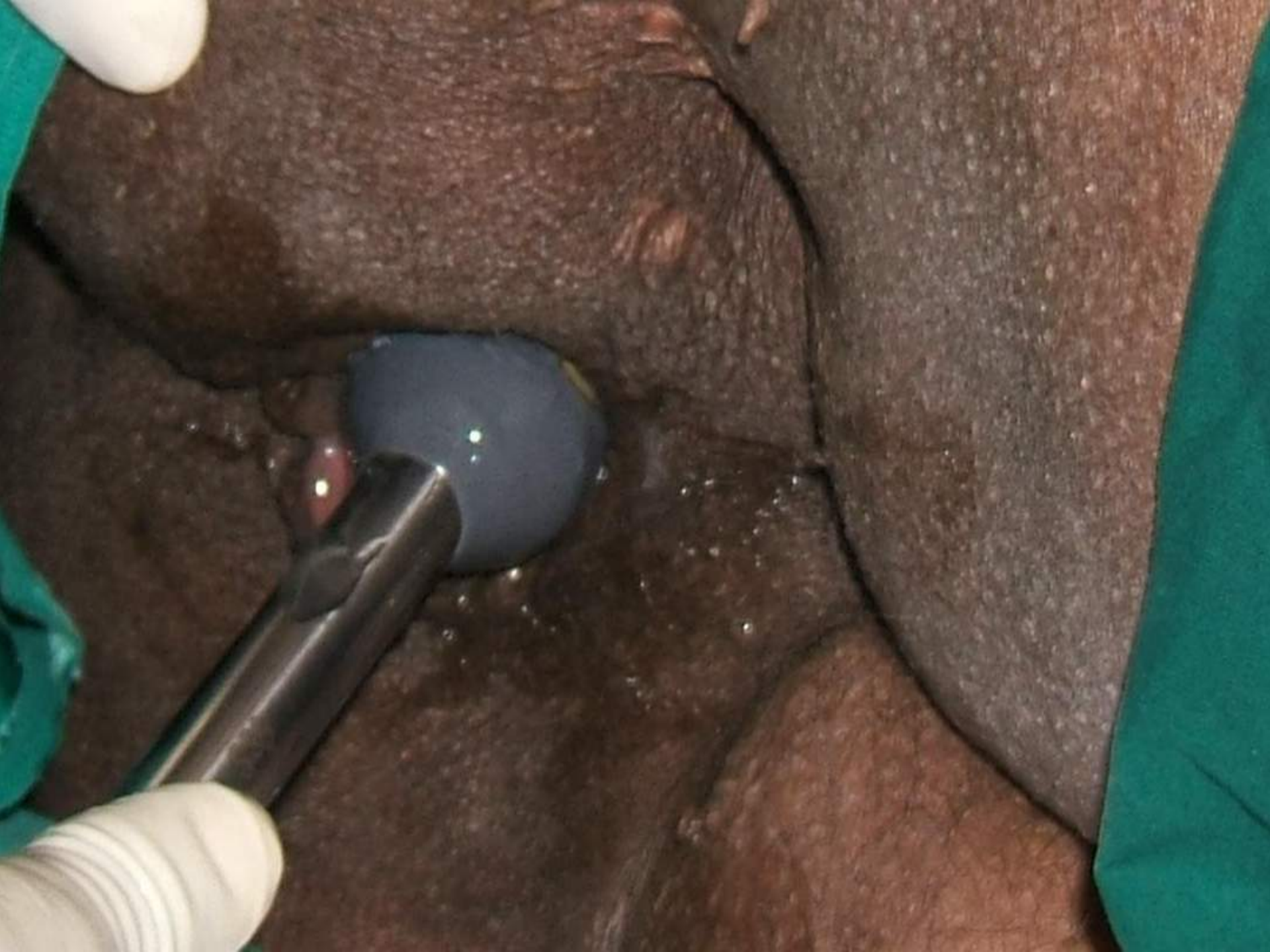
Seager Electroejaculator

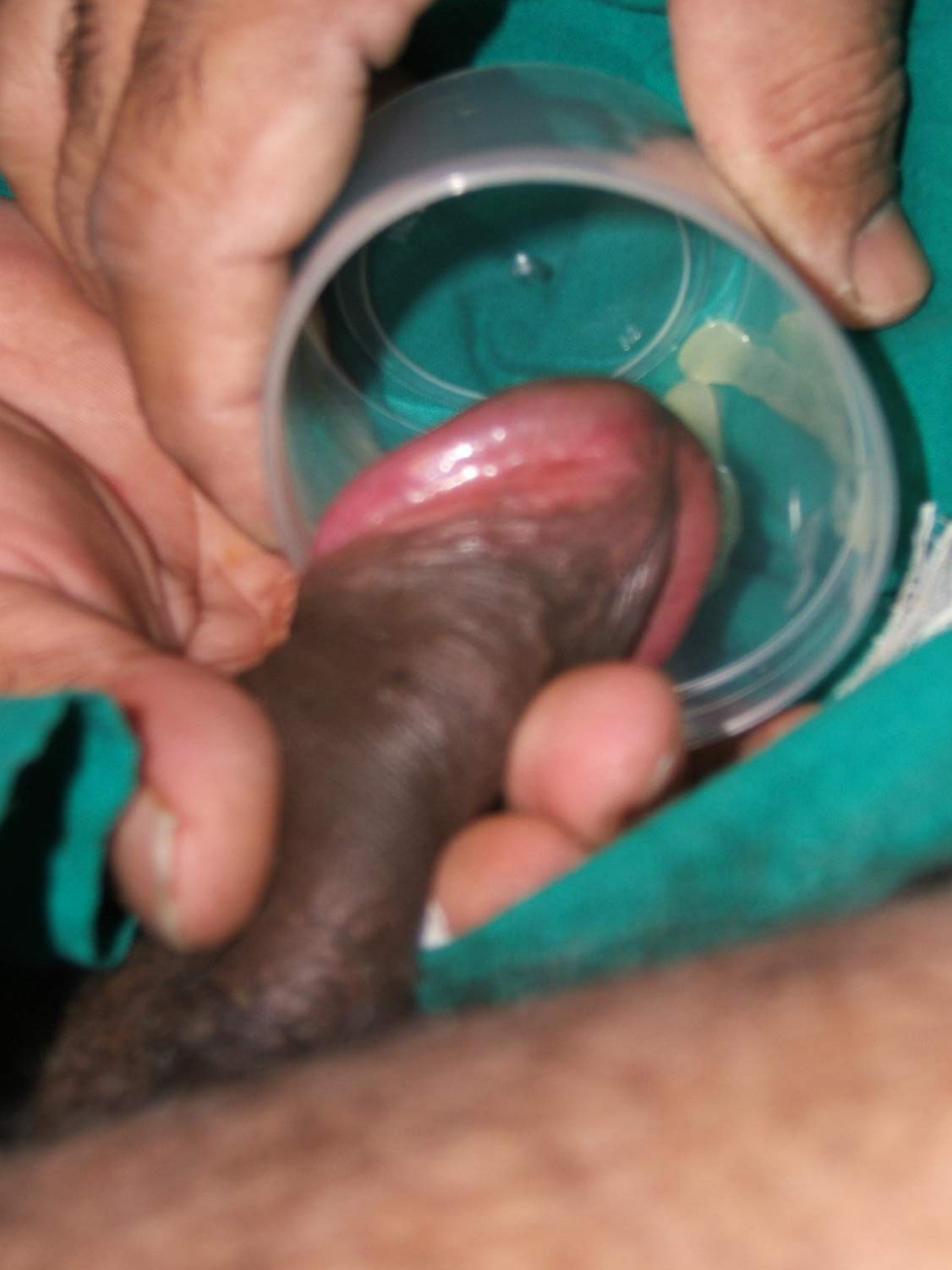
- Trans-rectal stimulation of nerves to S.V. & vas with an A/C current at 5-25 v, 100-500 mamps
- Very effective
- Needs G.A.

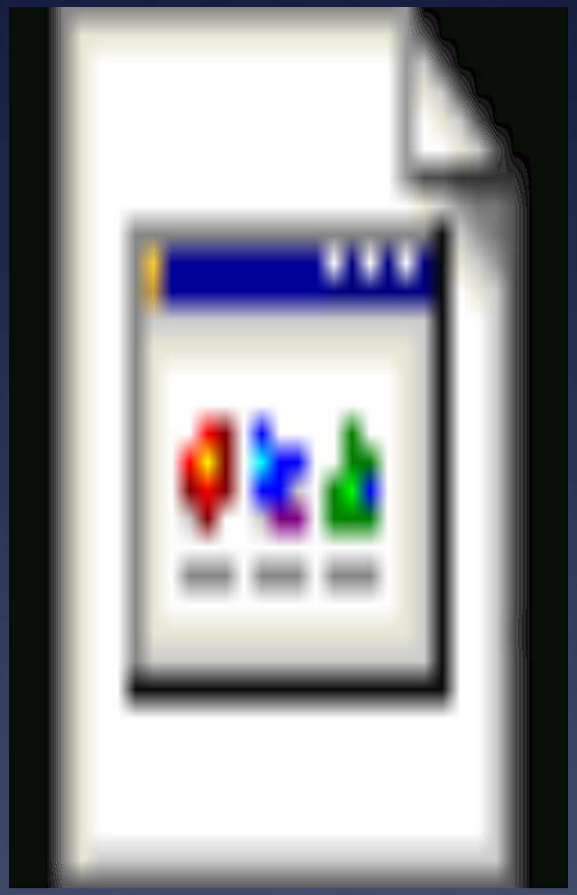
Electro Ejaculation











electro_short.mpg

Orgasmic Anejaculation

Due to organic causes:

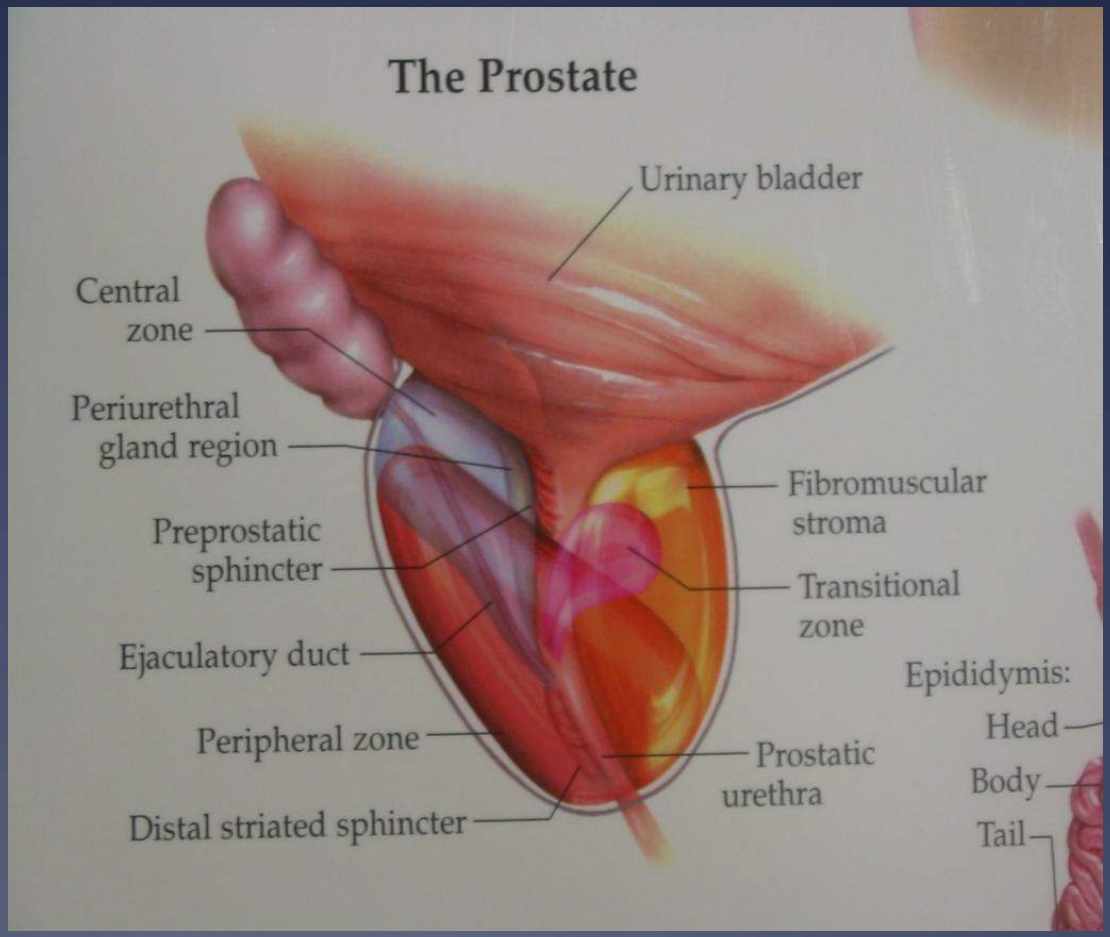
- Failure of emission
- Retrograde ejaculation
- Failure of propulsion

Phase I Disorders
Failure of Emission

- Anatomical obstruction : GU Koch's
- Neurogenic failure
  - SCI ; RPLND ; sympathectomy
- Pelvic, aortic, spine surgery
  Diabetic neuropathy ; drugs ; MS
- Endocrine: prepubertal hypogonadism
  :postpubertal hypogonadism

Treatment of Emission Failure

* **Due to anatomical block**
  - TURED not possible
  - PESA-ICSI



Emission Failure & Retrograde Ejaculation

Drug Therapy

Drug	Dose
Pseudoephedrine	60 mg QID
Ephedrine	30 mg QID
Phenylpropanolamine	75 mg QID
Imipramine	50 mg HS

- 2 week trial

Treatment of Emission Failure

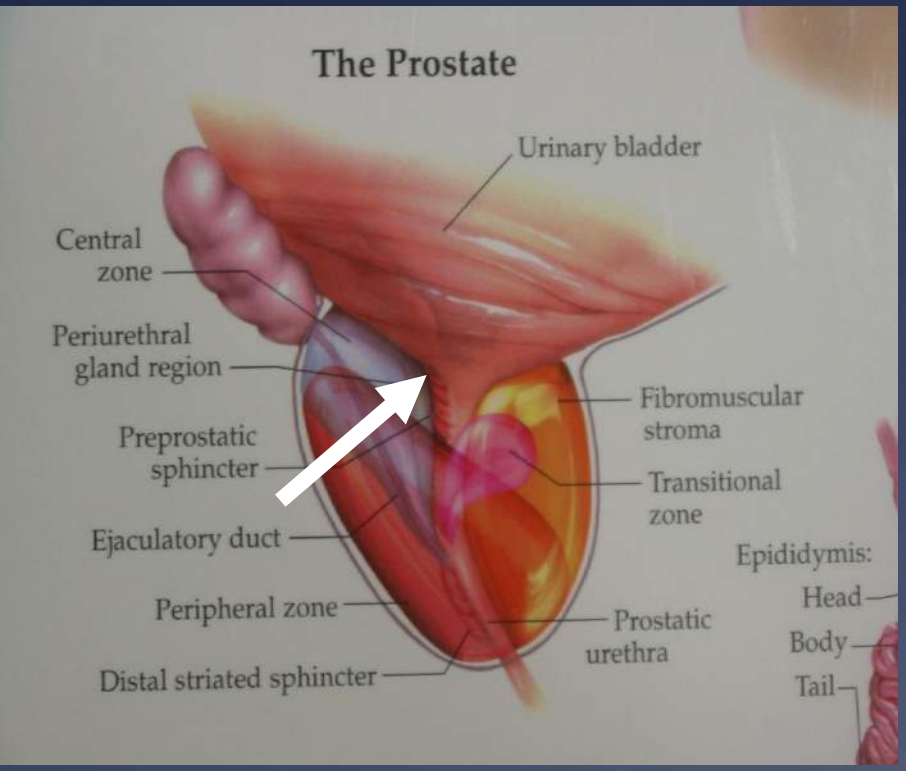
* **Due to impaired sympathetic activity**

- Medication : may help in diabetic neuropathy.
- Vibrator stimul. : 50% SCI respond
- Electroejaculation : highly successful

Treatment of Emission Failure

* Due to hypogonadotropic hypogonadism
  - gonadotropins
  - testosterone
* Due to testicular atrophy
  - testosterone

Phase-2 Disorder



- **Phase -2: Closure of bladder neck**

  Prevents retrograde ejaculation

Phase II Disorders
Retrograde Ejaculation

- Anatomical disruption of bl. neck
  - BNI; TUR; trauma
- Neurogenic failure of bl. neck fn.
  - diabetic neuropathy; α-blockers
- Congenitally wide bladder neck
- Idiopathic

Retrograde Ejaculation: Treatment

* **Due to damaged bladder neck**
  - drug therapy not effective
  - surgical reconstruction of BN : inadvisable
  - sperm retrieval from bladder
    from urine
    from medium

Retrograde Ejaculation: Treatment

* **Due to neuropathy**
  - drug therapy effective in 50%
  - sympathomimetics & anticholinergics

Retrograde Ejaculation
Sperm Recovery from Bladder

- Urine must be dilute and alkaline
- Start alkalinizer 2 days prior
- On collection day: fluids + alkalinizer
- Check urine pH every 20 minutes
- contd…

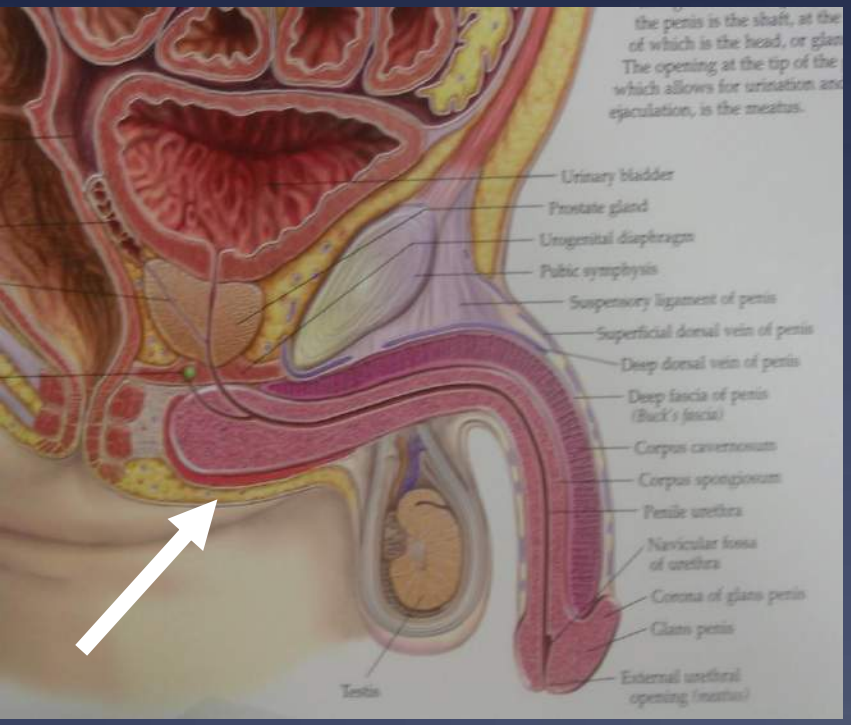
Retrograde Ejaculation
Sperm Recovery from Bladder

- When urine pH > 7.5, patient masturbates
- Post-orgasm urine is immediately collected and centrifuged
- Sperm pellet washed, processed for IUI

Retrograde Ejaculation
Sperm Recovery from Medium

- Start alkalinizer on previous day
- Dehydrate overnight
- Catheterize (mineral oil for lubrication)
- Instill 30ml medium & remove catheter
- Pt. masturbates & then voids medium
- Medium centrifuged to recover sperm

Phase 3 Disorders



* **Phase -3: Antegrade propulsion**

  By rhythmic contraction of BCM

Phase III Disorders
Failure of Antegrade Propulsion

- Bulbocavernous muscle dysfunction
  - Surgical disruption, myopathy pudendal neuropathy
- Anterior urethral obstruction
  - Diverticulum; pouch; stricture

Failure of Antegrade Propulsion

* If stricture / diverticulum:

  - surgical correction

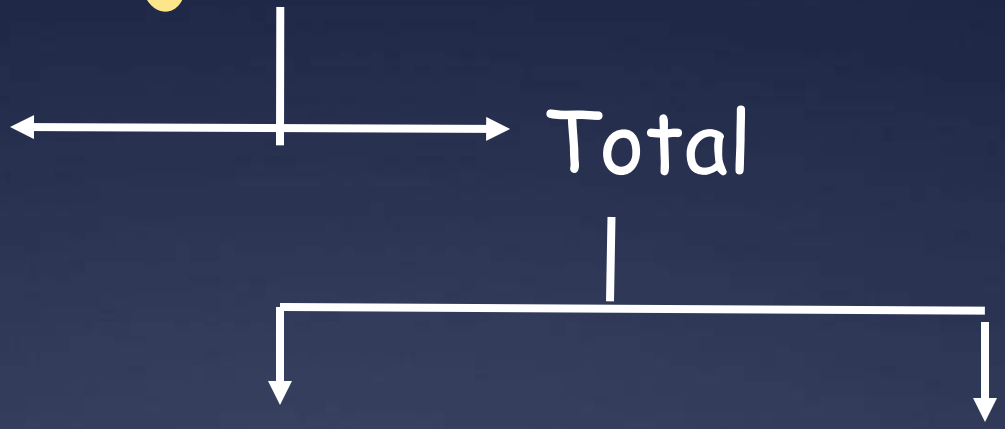
* If BCM myopathy/pudendal neuropathy or urethral pouch: post orgasm dribble

  - collect semen by milking urethra,

  - Use it for IUI

To Summarize

Anejaculation



Take Home Message for IVF Centers

- Every clinic should have a vibrator
- Majority will respond to vibrator stimulation
- Rest will need Electro-Ejaculation
- Or sperm aspiration with ICSI

Case 1

* 28 yr old, severe OAS
* Undergoing IVF
* Wife's egg pick-up done
* Cannot give a semen sample

Case 1

*

Diagnosis: Situational Anejaculation

Treatment: Vibrator;

Electro-Ejaculation;

TESA (NOT PESA)

Case 2

* 30 yr old, married 4 yrs.
* soon after marriage, h/o right testicular swelling followed by pus discharge
* Treated by medicines for 6 months
* c/o no ejaculation since 3 years

Case 2

Diagnosis:

Orgasmic anejaculation, phase -1 disorder;

Failure of Emission due to anatomical obstruction of EDO secondary to Genital Koch's

Treatment: PESA-ICSI

Case 3

* 23 yr old, unmarried
* h/o bilat testicular swelling

  followed by testicular atrophy, at 16 years of age
* c/o no ejaculation

Case 3

Diagnosis:

Orgasmic Anejaculation, phase-1 disorder;

Failure of emission due to ↓↓testosterone following testicular atrophy

Treatment: TRT; restore ejaculation, not fertility

Case 4

- 26 yr old , married 2 yrs.
- S.A.- 2ml, yellowish, Azoo, fructose negative

Orgasm ?

Case 4

*

Diagnosis: Anorgasmic Anejaculation

Treatment: Vibrator Therapy

Case 5

- 34 yr old, married 3 yrs
- h/o Left testicular malignancy 2 yrs
- Left Orchiectomy & RPLND done
- Cannot give a semen sample.

Case 5

Diagnosis:

Orgasmic Anejaculation, phase -1 disorder;

Neurogenic failure of Emission following operative damage to sympathetic ganglia – L1

Treatment: Electro-Ejaculation