

Dr NIKITA, Senior Resident

#### **Impotence**

Inability of a person to perform sexual intercourse



#### Sterility

Male- inability to beget children

Female- inability to conceive



All sterile persons may not be impotent

All impotent persons may not be sterile



### FRIGIDITY ????

- Inability to initiate or maintain
- Sexual arousal pattern in the female

• Impotence — Frigidity

### Causes → Male

#### (1) AGE- young and old



Before puberty→ erection + but no spermatozoa (usually)

\*\*\*Clue: look for features of other development in private part

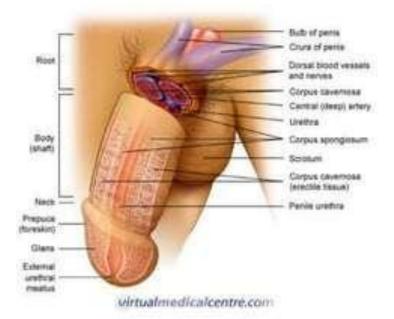
\*\*\*9 years old



Very old age → no specific age to suggest a loss of power 
\*\*\*spermatozoa may be present in semen of very old men 
\*\*\* 94 years old

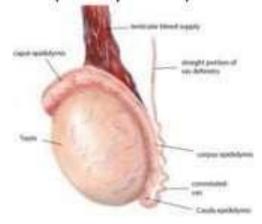
#### (2) Developmental /acquired defects of penis

- Absence/ underdeveloped penis
- Partial amputation of penis
- Epispadias and hypospadias is
   → sterility + no impotence
- Double penis / adherant to scrotum
   →sexual act may be difficult



- Testes underdeveloped→ sterility
- Cryptorchidism → not impotent usually sterile
- Testes removed before puberty
  - → impotence + sterility
- Testes removed after puberty

   usually sterility alone
- Removal of one testis → no effect
- · Both testes +
  - → but can be still sterile (azoospermia)



### (3) Local diseases

- Mechanical obstruction- phimosis/paraphimosis
- Local Diseases- gonorrhoea/ local infections/ sores on the penis
  - TB/ syphilis
  - sarcoma
- Trauma to penis/ testis

L4-L5 injury

S2- S4 segment injury

Brain damage



- Diseases of the spine- tumors/ cauda equina/ spina bifida
- Surgical damage- lumbar sympathectomy, lithotomy operations
- Exposure to X-rays- temporary azoospermia
- Mumps and orchitis -> occasionally lead to sterility and not impotence



### (4) General Diseases

- Any acute illness- temporary impotence
- Diabetes
- Tuberculosis
- Chronic nephritis
- Syringomyelia
- Tabes dorsalis
- Paraplegia
- Disseminated sclerosis
- Locomotor ataxia



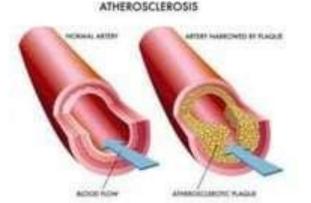


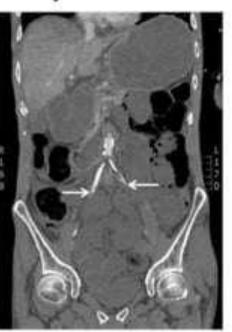
### (5) Vasculogenic causes

- Most frequent cause of erectile dysfunction-
- Decreased arterial flow- atherosclerosis

#### Lerische Syndrome

- Arteriosclerosis: diabetes, hypertension, pelvic/genetic injuries
- Venogenic : venous outflow





### (6) Toxicological damage

- Alcoholism
- Anabolic steroids
- Heroin
- Cannabis
- Heavy smoking >> thrombosis in penile vessels
- Occupational exposure to lead





### (7) Drugs

- Anti-hypertensive
  - · Thiazide type diuretics
  - Aldosterone receptor
  - Beta adrenergic blockers
- Opiates
- Psychotropic
- Tranquilisers



Affect neurotransmitters



### (8) Psychic causes

- Emotional disturbances- temporary
- Anxiety, depression
- First night incompetence/ bridegroom incompetencetemporary
- Sexual overindulgence, repeat masturbation
- Guilt sense
- Paranoia
- General impotence of the insane
- Impotence Quoad hoc (as far as this) impotent with one particular women but not with others



## Summary of the causes



- 40 %→ Vasculogenic impotence
- 15 to 20 %→ Diabetes mellitus
- 12 %→ Psychogenic
- 7 %→ Neurogenic

#### Causes of impotence in the female

- (1) Age- Not much effect on potency (passive agent) Sexual desire is lost in old age Fertile- from puberty to menopause
- (2) Developmental defects and acquired defects
- (3) Local diseases →

may not produce impotence but may cause sterility

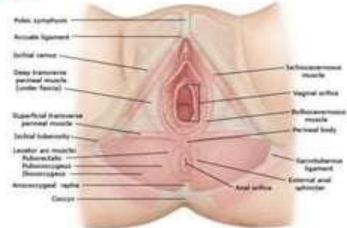
eg: ovarian diseases, endometritis

- (4) General diseases: do not cause impotence (passive agent)
- (5)Psychic factors: it is of active nature called 'vaginismus'



## "Vaginismus"

- Spasmodic contraction of the vagina
- Due to hyperaesthesia
- Spasm of adductor muscles



- Usually related to psychological cause
- But may be secondary to organic cause

## Frigidity

- Usually psychological
- In a female who has developed a dislike to sexual intercourse
  - Dislike of the partner
  - Neurological disorders
  - Hypothyroidism
  - Sedatives/depressants
  - menopause



## **Medico-legal Importance**

1. Nullity of marriage



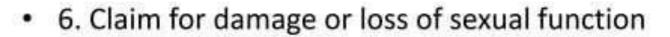
· 2. Divorce



- 3. Disputed paternity and legitimacy
- · 4. Suits of adoption









7. Adultery



8. Rape



· 9. Unnatural sexual offences



### Fecundation ab extra



- Conception is possible
- Without penetration of vagina by penis
  - Due to passage of spermatozoa
  - Deposited in the external genitalia
  - To the uterus
- Rhythmic contraction of genital passage and pelvic floor muscles help in it

### **EXAMINATION OF POTENCY**

Red	quisition	received	from	the		vide	his	letter
no:	dated	th	rough So	CPO No:		For	examina	tion of
pot	tency o	of	aged	yea	ars	involved	in	Crime
No	:	of	Police Sta	ition				
1.	Name and address of the subject							
2.	Age3. Occupation4. Accompanied by							
5.	Date and time of examination							
6.	Consent							
7.	Marks of identification							
8.	Clinical History: diabetes/ trauma/ drug addiction / exposure to venera							
die	asses/ oth	ors if any						

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History and sexual development :
        Masturbation/ night emission/ homosexual practice/
        sexual intercourse
Physical examination
       A. General Examination : height, weight, built
               Adam's apple
                Hair- pubic/axillary/facial/chest
        B. Local
                Penis: present/absent
                        Length.....cm (in flaccid state)
                        Circumference ......cm (in flaccid state)
                        Disease
                        Deformity
                        Injury
                        Sensation over glans penis
                        Foreskin
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- Scrotum: pendulous/ non-pendulous
- · Testis: right /left
  - Development of testes small/ medium/ adult
  - Sensation
  - Disease/ deformity/injury
- Epidydimis and cord
- C. Systemic examination CVS, GIS, RS, CNS
- D. Special examination (if relevant)......Bulbocavernous reflex

#### Opinion:

- There is nothing to suggest that the above person is incapable of performing sexual intercourse
- The above person is incapable of performing sexual intercourse because of



- There is nothing to suggest that the above person is incapable of performing sexual intercourse
- Double negative format
- Why?????

Cannot prove psychological factors

### Contraceptive Sterilisation

- Procedure done without interfering with potency
- Methods- Surgical/ radiological/chemical/ mechanical

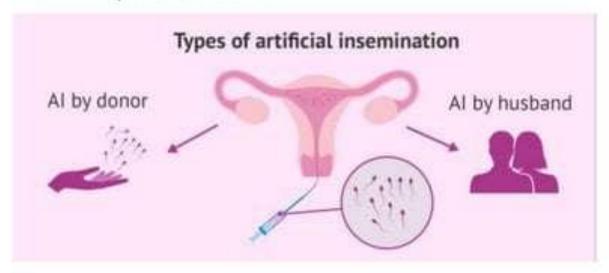
#### Guiding principles:

- Consent of both wife and husband taken
- Preferable to check after vasectomy in a male
- Refrain from intercourse for three months/ till absent spermatozoa in semen
- Pills taken for contraception should always been given after explaining complications



### **Artificial Insemination**

- Artificial introduction of semen into the vagina, cervix or uterus to produce pregnancy
- Types:
- (1) A.I.Homologous → husband's sperm
- (2) A.I.Donor→ when a donor's sperm is used
- (3) A.I.H.D → pooled semen

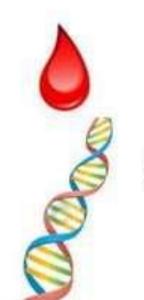


### **Indications**

(1) Husband is impotent/sterile

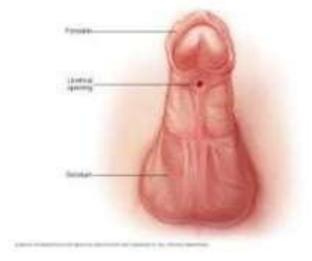


(2) Difficulty in depositing semen eg: hypospadiasis



(3) Rh incompatibility

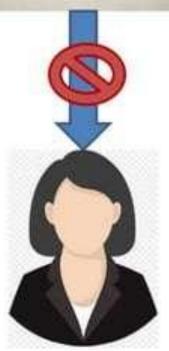
(4) Any hereditary disease

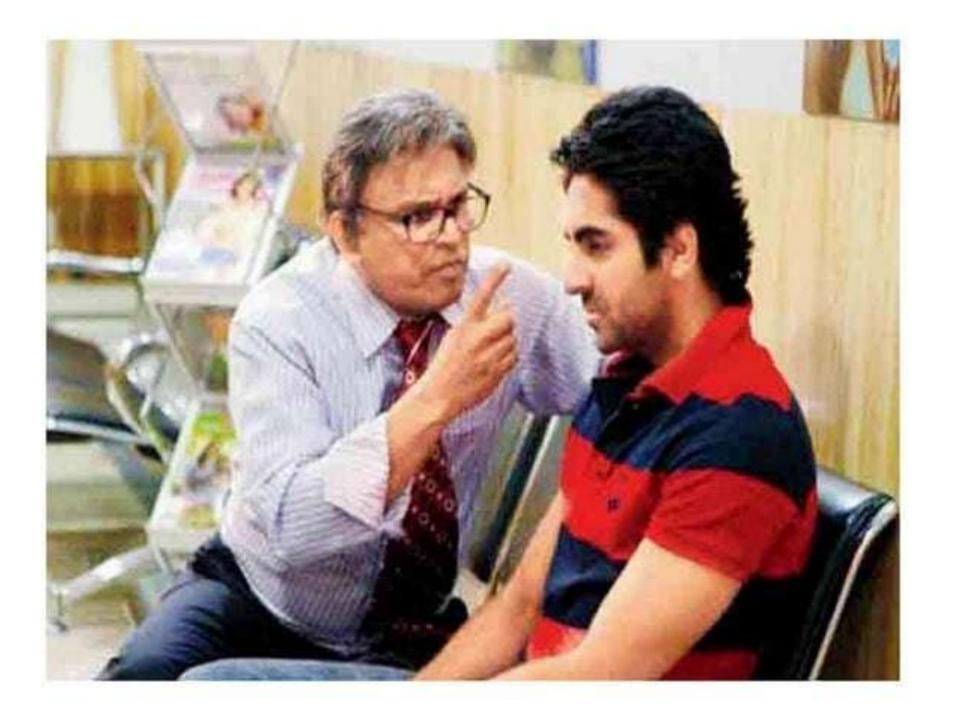


### Principles when a donor is used

- Consent of the donor and his wife-necessary
- 2. Identity of the donor- secret
- 3. Donor should not know the recipient too
- 4. Donor- healthy+ no hereditary disease
- 5. Donor must not be a relative of the recipient
- Race should resemble
- 7. Donor- same blood group of the husband
- 8. No Rh incompatibility







- 9. Physician selects the donor
- 10. Couple- psychologically fit and emotionally stable
- 11. A witness must be present during insemination
- 12. Pooled semen preferred whenever possible
- Physician doing insemination should not conduct the delivery - to avoid falsifying of documents
- 14. A single donor not > 10 children

### **Legal Problems**

- Adultery- donor or recipient → not guilty
- 2. Legitimacy- husband not actual father Inheritance not possible
- Never a ground for divorce if for sterility
   But if impotent → divorce ++
- 4. An unmarried women/ widow- can have a child by artificial insemination → the status of the child remains illegitimate
- Incest there is a possibility between the donors children and the A.I children. (India legally not punishable)

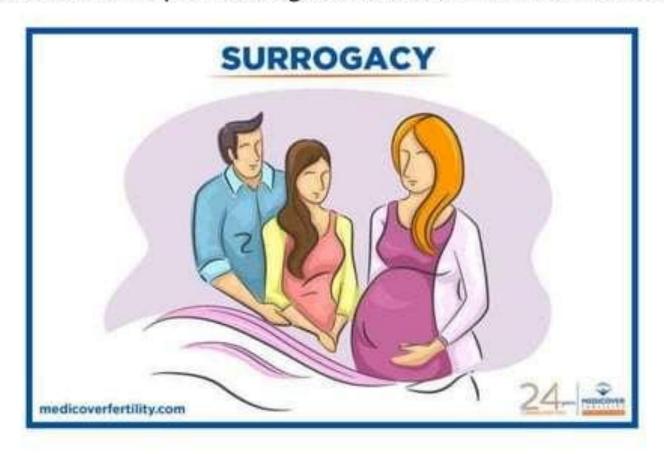
### Assisted reproductive techniques

- IVF
- No legal statutes as such in Indian Law
- It is done according to the regulations of ICMR



## Surrogate motherhood

A woman who by contract agrees to bear a child for someone else



Complete surrogacy → ovum +uterus

2. Gestational surrogacy → uterus alone

Ovarian surrogacy → ovum alone



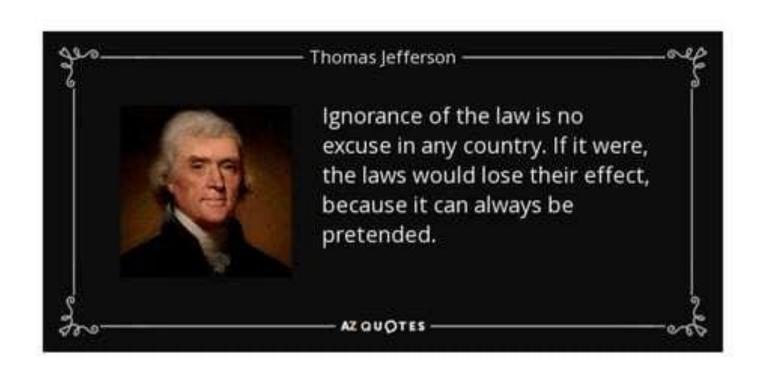
### **CLONING**

- Genetically identical duplicate
- Usually done for therapeutic diseases in medicine



### Important questions

- Causes of impotence
- Impotence Quoad hanc
- Drugs causing impotence
- 4. Medico-legal importance
- Artificial insemination



# THANK YOU