



**Psychogenic  
infertility**

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It is a part of unexplained infertility

- The prevalence of psychogenic infertility is likely to be 5 per cent

# Historically

- Infertility, particularly "functional" infertility, was attributed to abnormal psychological functioning on the part of one or both members of the couple.

## In the 1940s and 1950s

- Preliminary work considered "psychogenic infertility" as the major cause of failure to conceive in as many as 50% of cases.

# The Late 1960s

- It was commonly believed that reproductive failure was the result of psychological and emotional factors
- Psychogenic infertility was supposed to occur because of unconscious anxiety about sexual feelings, ambivalence toward motherhood, unresolved Oedipal conflict, or conflicts of gender identity

# Modern Research

- Fortunately, advances in reproductive endocrinology and medical technology as well as in psychological research have de-emphasized the significance of psychopathology as the basis of infertility
- It shows that there is little evidence to support a role for personality factors or conflicts as a cause of infertility.
- This perspective unburdens the couple by relieving them of the additional guilt of thinking that it is their mental stress that may be responsible for their infertility.

# HOW ?? 1

- Hypothalamus regulates both stress responses as well as **the sex hormones**,
- Excessive stress may even lead to complete suppression of the menstrual cycle, and this is often seen in female marathon runners, who develop "runner's amenorrhea".
- In less severe cases, it could cause anovulation or irregular menstrual cycles.
- When activated by stress, the pituitary gland also produces increased amounts of prolactin, and elevated levels of prolactin could cause irregular ovulation

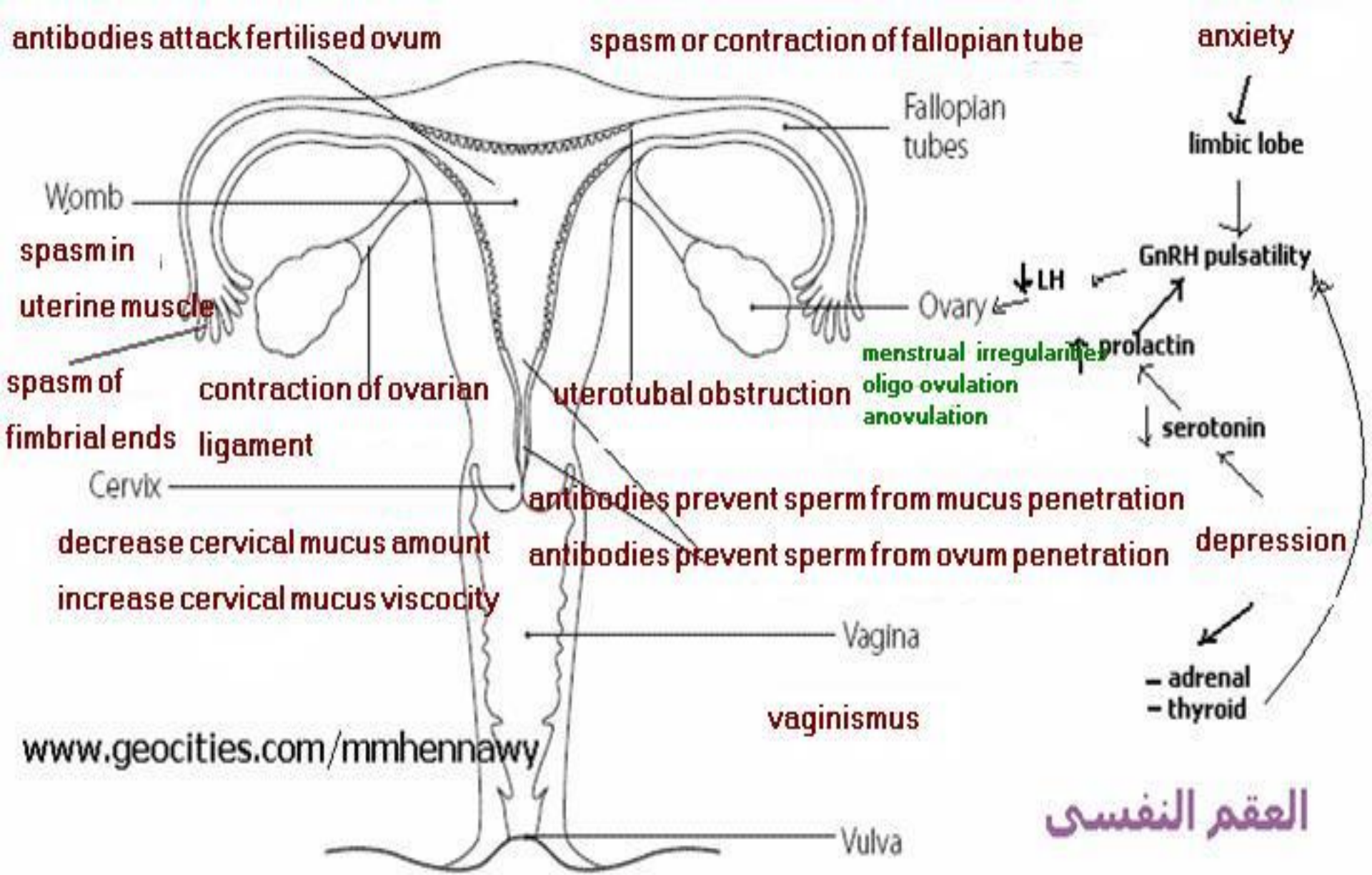
# HOW ?? 2

- The female reproductive tract contains **catecholamine receptors**
- Catecholamines produced in response to stress may potentially affect fertility,
- by interfering with the transport of gametes through the fallopian tube
- or by altering uterine blood flow.



# HOW ?? 3

- the brain produces special molecules called neuropeptides, in response to emotions, and these peptides can interact with every cell of the body, including those of **the immune system**.
- In this view, the mind and the body are not only connected, but inseparable, so that it is hardly surprising that stress can have a negative influence on fertility.

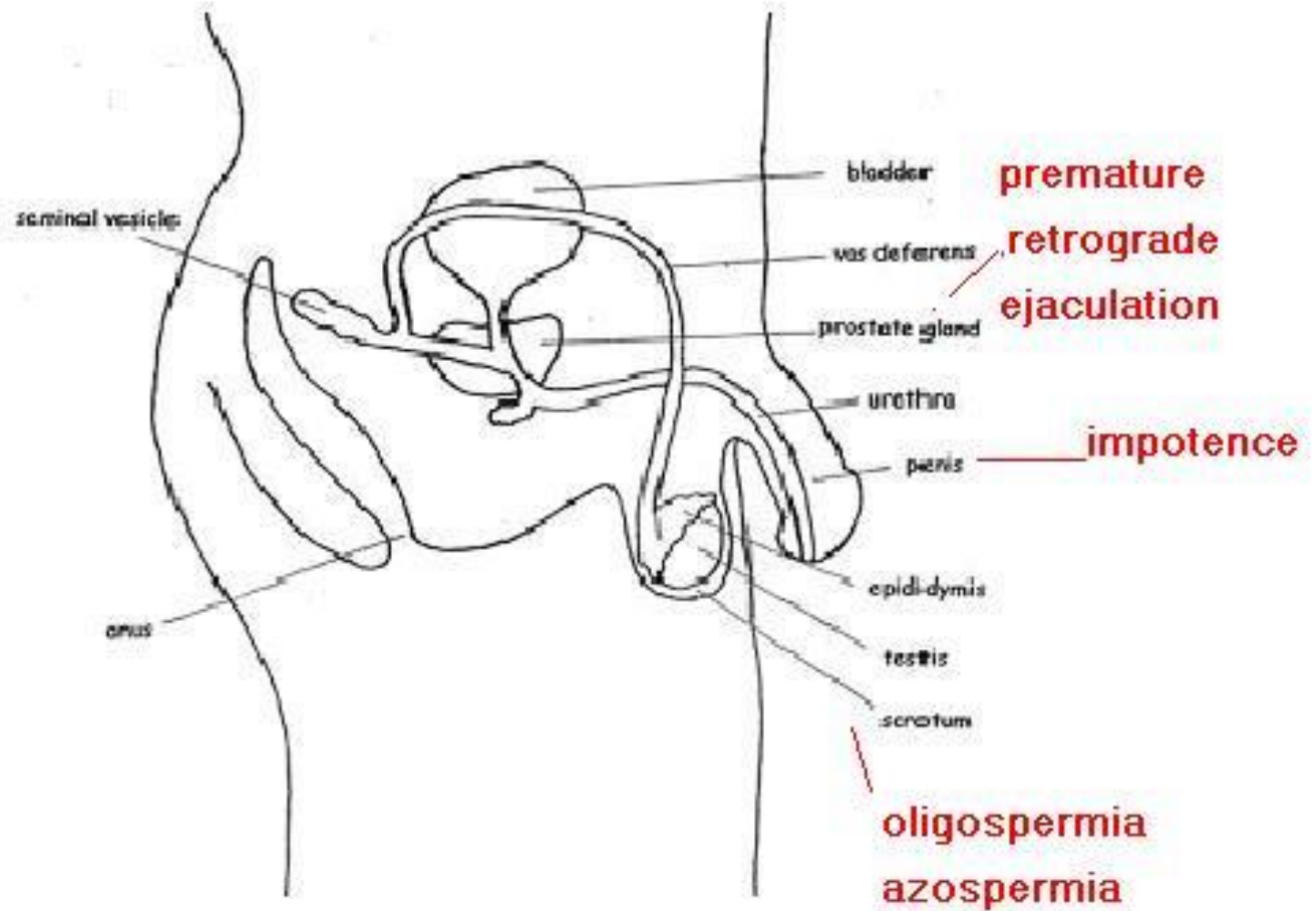


**العقم النفسى**

# Female psychogenic causes

Vulva	
Vagina	Vaginismus prevent coitus
Cervix	Decrease cervical secretion amount for Increase cervical mucus viscosity Antibodies prevent cervical mucus penetration by sperm
Uterus	Changing uterine blood flow Changing uterine motility Antibodies attack fertilised ovum
Tube	Uterotubal spasm Changing tubal motility interfering with the transport of gametes through the tube fimbrial end spasm Antibodies prevent ovum penetration by sperm
Ovarian Ligament	Contraction of ovarian ligament
Ovary	Excessive stress may even lead to complete suppression of the menstrual cycle In less severe cases, it could cause anovulation or irregular menstrual cycles.
Endocrine glands	the pituitary gland produces increased amounts of prolactin, and elevated levels of prolactin could cause irregular ovulation
brain	brain produces special molecules called neuropeptides, in response to emotions, and these can interact with every cell of the body, including those of the immune system
	lack of sexual desire

**decrease lipido**



# Male psychogenic causes

Penis	Faliure of erection ( impotence )
Urethera	
Ejaculatory ducts	Premature ejaculation Retrograde ejaculation
Seminal vesicle	
Prostate	
Testis	oligozoospermic , morphological abnormalities , Azoospermia
Endocrine glands	oligozoospermic , Azoospermia
brain	<b>lack of sexual desire</b>

# The relationship between stress and infertility is still poorly understood today

- While there is little doubt that infertility causes considerable stress,
- the question
- whether stress can **cause** infertility,
- and
- whether stress reduction can **enhance** pregnancy rates in infertile couples,
- is still very controversial

- Although several authors have suggested an important pathogenic role for psychosocial factors in 'functional' infertility, the extent to which depression, anxiety and expressed emotional patterns correlate to infertility is not yet clear.

- Learning of one's infertility can often generate depression and lack of sexual desire.
- Work-ups and treatments can interfere with the couple's intimacy, and the body image of each partner.
- Sometimes the final arrival of a child cannot completely repair felt psychological failure



# At Present

- whether differences exist regarding
- anxiety, depression, and anger management in couples with certain organic causes of **infertility** ('organic' **infertility**)
- and those with **infertility** due to certain non-organic causes ('functional' causes).
- Because these couples are exposed to the same stressor (**infertility**) the finding of different levels of anxiety, depression and anger might suggest a role of these elements in the pathogenesis of 'functional' **infertility**

the psychological features of **infertility** are based on two contrasting theoretical models

- The first model (psychodynamic-oriented) consider the role of **psychogenic** elements among the causes of **infertility** ('**psychogenic**' hypothesis);
- or
- The second model consider a psychological distress is secondary to **infertility**.

# Acupuncture and Infertility

- Acupuncture affect both psychological and emotional factors as well as physical ones.
- For example, extremely painful premenstrual or mid-cycle pain can be debilitating. This type of physical stress no doubt produces emotional stress as a result of missed work, interference in activities, and the pain itself, which in turn can compromise the **function of the reproductive system**.
- The hormone ACTH, which is released as a response to acupuncture needle stimuli, has an antiinflammatory effect that may improve fertility (for example, by improving with **tubal** factor–based infertility as a response to pelvic inflammatory disease).
- In addition, the insertion of acupuncture needles has been shown to effectively increase blood circulation. Enhanced **blood flow** to the **uterine lining** undoubtedly contributes to a healthier and more growth-oriented endometrium, especially when stimulation acupuncture points known as zigongxue, which reside above the ovaries.
- Acupuncture releases endorphins that mitigate one's response to stressful stimuli, thus enhancing the possibility of **conception** as stress reduces the hypothalamic-anterior pituitary-ovarian axis function

# In a study

- women who were about to undergo IVF were randomly assigned to receive acupuncture therapy before and after embryo transfer
- In the women who received acupuncture, the needles were placed at points believed to influence reproductive factors (for example, by improving blood flow to the uterus).
- The acupuncture group had a higher rate of pregnancy compared with those not given acupuncture (43% versus 26%), suggesting that acupuncture can be used to improve pregnancy rates during IVF.

# Conclusions

- The "psychogenic infertility model" has yet to receive scientific confirmation
- Equating idiopathic infertility with psychogenic infertility is counter-productive because it can enhance emotional distress and feelings of guilt in infertile women/couples
- The prevalence of psychogenic infertility is likely to be 5 per cent
- Psychological counselling should be offered to all infertile couples independent of their individual diagnoses
- Main focus in psychological counselling should be to help couples to cope with infertility and not to uncover unconscious conflicts towards parenthood