

Drugs Used In Treatment Of Infertility/Subfertility

Sources:

- Bertram G. Katzung Basic & Clinical Pharmacology 15th Edition
- Goodman and Gilman's The Pharmacological Basis of Therapeutics 13th edition.
Laurence Brunton, Bjorn Knollmann, Randa Hilal-Dandan - (2017)

MOTTO AND VISION



- To impart evidence based research oriented medical education
- To provide best possible patient care
- To inculcate the values of mutual respect and ethical practice of medicine

Types Of Infertility/Subfertility

- **Primary**
- **Secondary**

Causes Of Female Infertility/Subfertility

- **Disorders of Ovulation**
- **Impaired Oocyte Production**
- **Tubal Dysfunction**
- **Disorders of Implantation**

Causes Of Male Infertility/Subfertility

- **Disorders of Spermatogenesis**
- **Impaired sperm transport**
- **Ejaculatory Dysfunction**
- **Immunological & Infective factors**
- **Idiopathic**

Role of Lifestyle modification

Drugs Used For Infertility/ Subfertility

- **Clomiphene Citrate**
- **Gonadotropins**
 - Menotropin
 - Urofollitropin
 - rFSH (Follitropin alfa,beta)
 - LH (Lutropin alfa)
 - hCG, rhCG
- **GnRH AGONISTS**

Gonadorelin, Goserelin, Histrelin, Buserelin
Nafarelin, Triptorelin, Leuprolide

Clomid Side Effects



Hot flashes



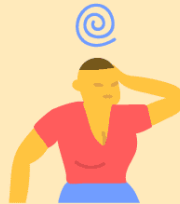
Bloating



Weight gain



Mood swings



Nausea



Headaches



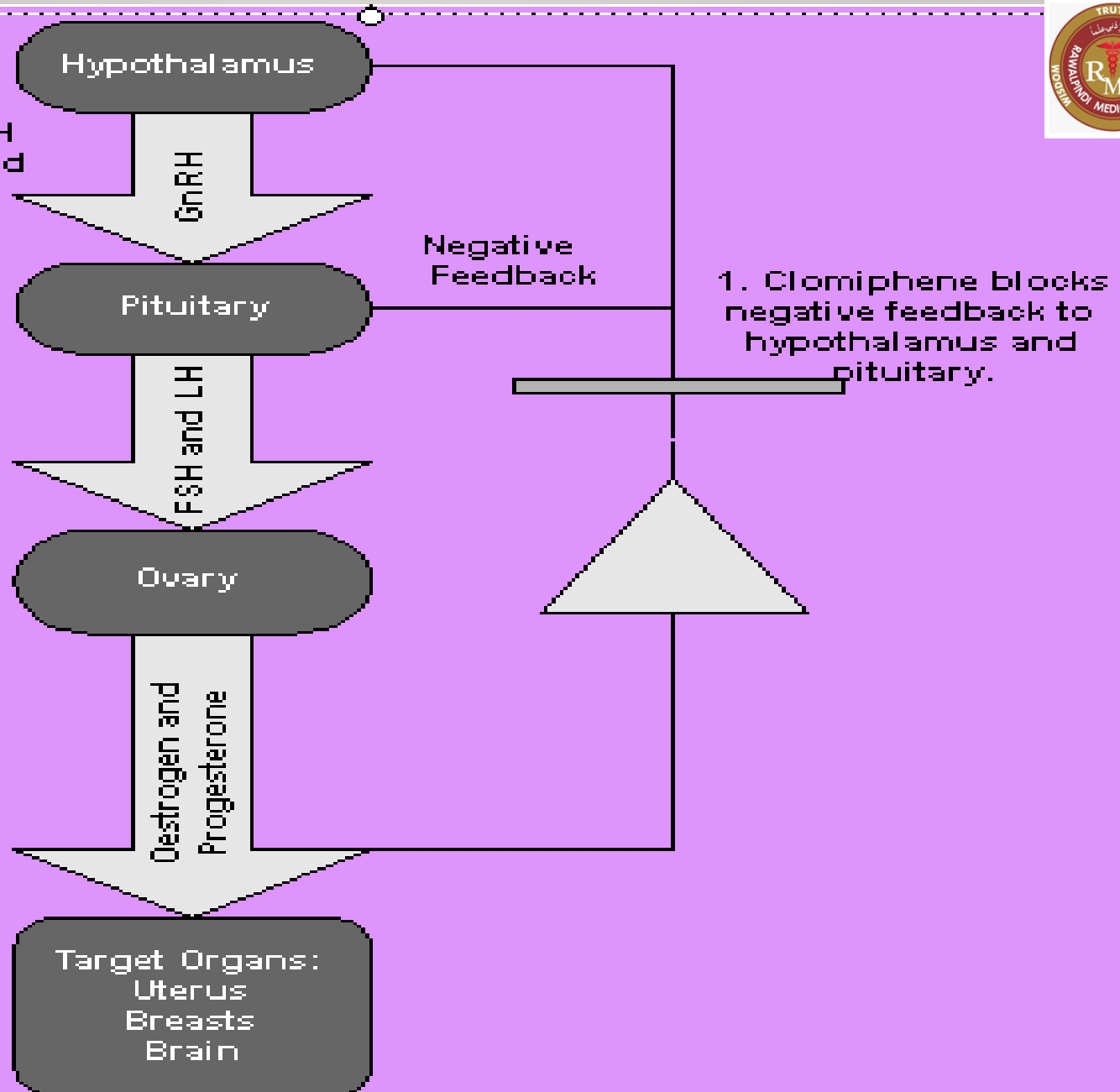
Breast tenderness

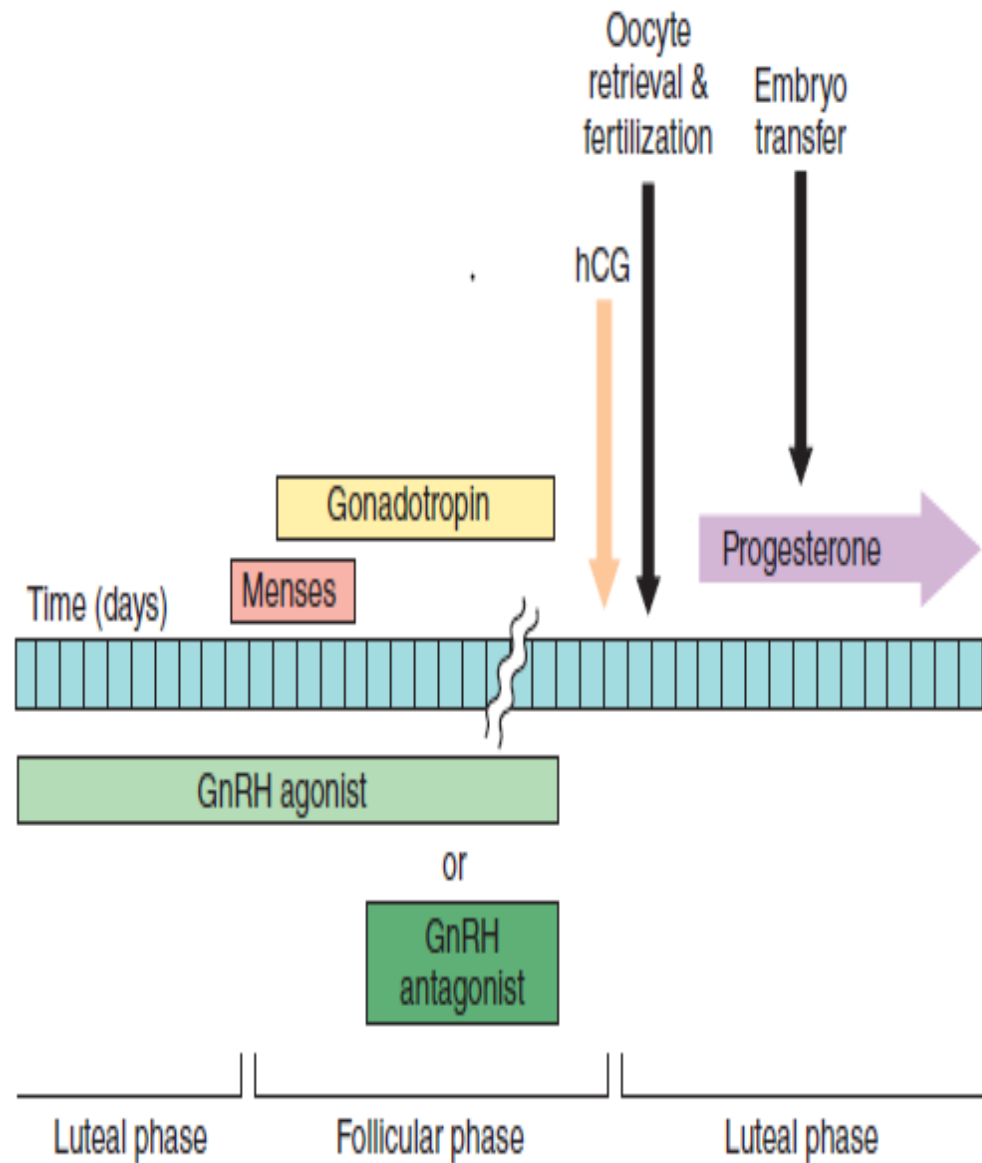


Blurred vision

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- **Aromatase inhibitors**
 - **Letrozole, Anastrozole**
 - **Metformin**
 - **Bromocriptine**
 - **Danazol**

2. GnRH, FSH and LH secretion are increased as a result of the block to the negative feedback.

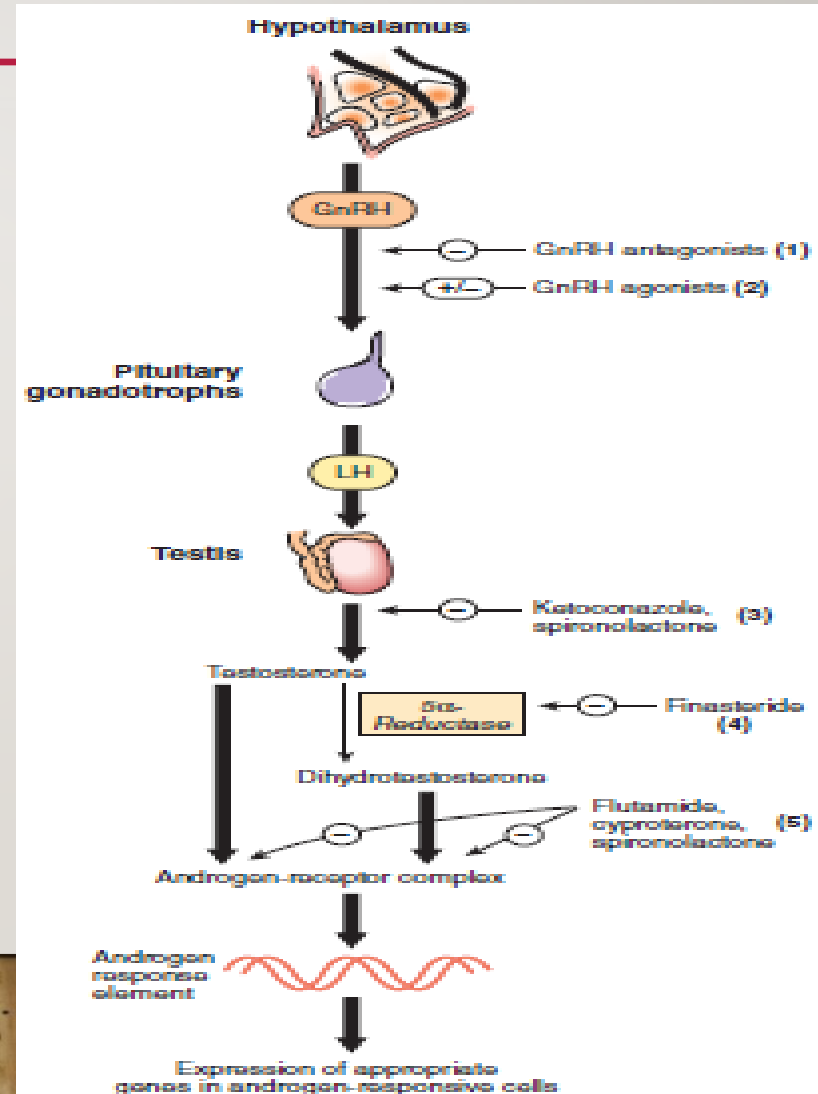




Ethical issue with Ovarian Stimulation & IVF

Androgen Suppression & Anti Androgen

- Androgen suppression
- Anti androgen



EOLA

Mrs JD is a 25-year-old aerobics teacher. She has irregular periods and has a low BMI of 17. She exercises for 4–5 hours a day. She is otherwise well and has no significant past medical or surgical history. Her husband, Mr MD, works as a computer programmer. He is well and has no significant past medical or surgical history. They are both non-smokers and neither of them drinks alcohol.

Research, Bioethics, Artificial Intelligence, Family Medicine

- Rizzuto, I., Behrens, R.F. and Smith, L.A., 2019. Risk of ovarian cancer in women treated with ovarian stimulating drugs for infertility. *Cochrane database of systematic reviews*, (6).
- Norman, R.J. and Costello, M., 2023. O-094 Management of subfertility in women with PCOS: expectations, problems and solutions. *Human Reproduction*, 38(Supplement_1), pp.dead093-113.
- Celik, O., Aydin, S., Celik, N., Ugur, K., Yavuzkir, S., Hatirnaz, S., Yardim, M. and Celik, S., 2019. Molecular role of peptides/proteins in subfertility of polycystic ovarian syndrome. *Cellular and Molecular Biology*, 65(3), pp.32-40.
- Malani IV, S.N., Shrivastava, D. and Raka, M.S., 2023. A comprehensive review of the role of artificial intelligence in obstetrics and gynecology. *Cureus*, 15(2).