ALTIS

Debate SERIES

Issue 5

Dydrogesterone In Fresh IVF Cycles

KEY POINTS

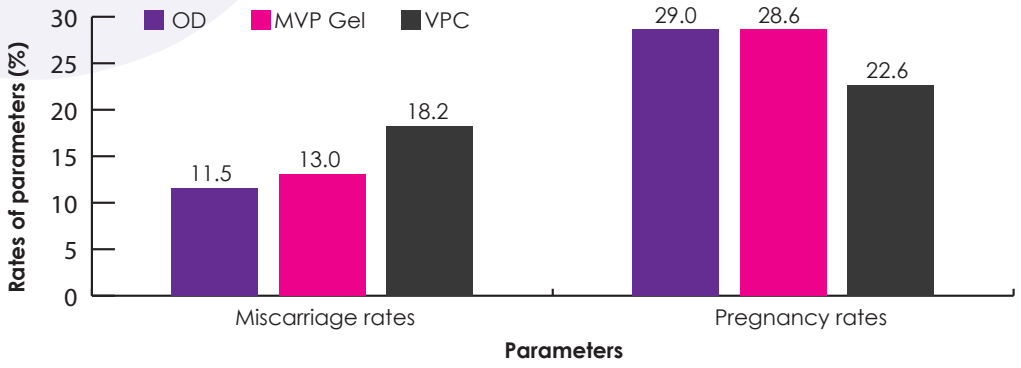
- Due to convenient **oral administration of dydrogesterone** it is the **new standard** for luteal phase support in **fresh transfer IVF** cycles
- Dydrogesterone is associated with **good tolerability** and **bioavailability**

Dydrosure

Debate Point 1

Dydrogesterone is effective for luteal phase support in ART cycles

Comparison of efficacy of dydrogesterone with MVP gel and VPC in fresh cycle IVF[1]



Dydrogesterone is a favourable drug for LPS in fresh cycle IVF women

Abbreviation: OD: Oral dydrogesterone, LPS: Luteal phase support, MVP: Micronized vaginal progesterone, VPC: Vaginal progesterone capsules

Dydrogesterone for luteal phase support in ART cycles[2-7]

Assisted reproductive technologies (ART) result in luteal phase deficiency which is identified by inadequate progesterone production[2]

Dydrogesterone has **high progesterone receptor selectivity**

Dydrogesterone is associated with **good tolerability and bioavailability (28%)**

Oral dydrogesterone is the new standard for **luteal phase support in fresh transfer IVF** cycles

CONCLUSION

Dydrogesterone treatment leads to comparatively higher pregnancy rates and lower miscarriage rates in fresh IVF cycles.

References: 1. Ganesh A, Chakravorty N, Mukherjee R, Goswami S, Chaudhury K, Chakravarty B. Comparison of oral dydrogestrone with progesterone gel and micronized progesterone for luteal support in 1,373 women undergoing in vitro fertilization: a randomized clinical study. *Fertil Steril.* 2011;95(6):1961-5. **2.** Mohammed A, Woad KJ, Mann GE, Craigon J, Raine-Fenning N, Robinson RS.Evaluation of progestogen supplementation for luteal phase support in fresh in vitro fertilization cycles. *Fertility and Sterility.* 2019;112(3):491-502e3. **3.** Panagiotis D, Caroline R, Michel DV, Shari M, AnnaLisa R, Herman T, Christophe B.The Future of Luteal Phase Support in ART and the Role of Dydrogesterone. *Frontiers in Reproductive Health.* 2021;2. **4.** Griesinger G, Blockeel C, Tournaye H. Oral dydrogesterone for luteal phase support in fresh in vitro fertilization cycles: a new standard? *FertilSteril.* 2018;109(5):756-762. **5.** Griesinger G, Blockeel C, Sukhikh GT, Patki A, Dhorepatil B, Yang DZ, Chen ZJ, Kahler E, Pexman-Fieth C, Tournaye H. Oral dydrogesterone versus intravaginal micronized progesterone gel for luteal phase support in IVF: a randomized clinical trial. *Hum Reprod.* 2018;33(12):2212-2221. **6.** Griesinger G, Blockeel C, Kahler E, Pexman-Fieth C, Olofsson JI, Driessen S, Tournaye H. Dydrogesterone as an oral alternative to vaginal progesterone for IVF luteal phase support: A systematic review and individual participant data meta-analysis. *PLoS One.* 2020;15(11):e0241044. **7.** Netter A, Mancini J, Buffat C, Agostini A, Perrin J, Courbiere B. Do early luteal serum progesterone levels predict the reproductive outcomes in IVF with oral dydrogesterone for luteal phase support? *PLoS One.* 2019;14(7):e0220450.

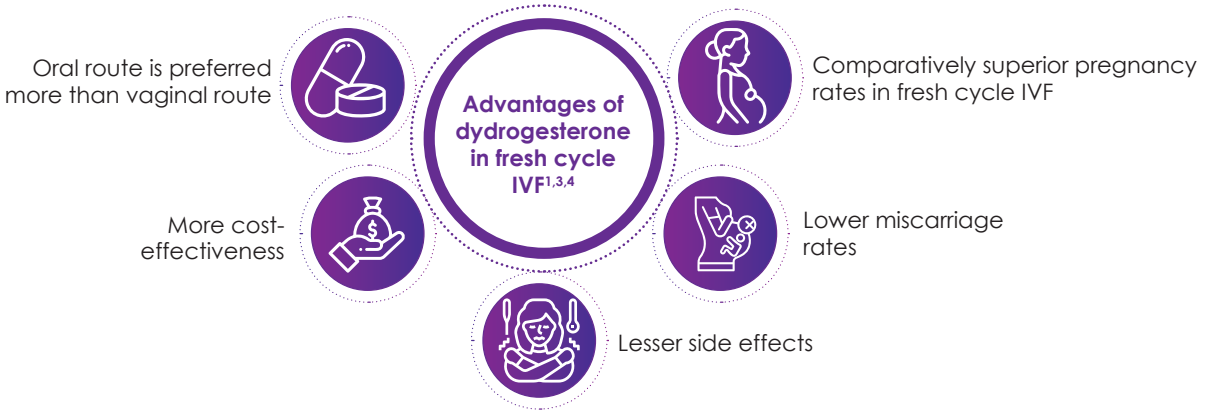
Debate Point 2

Oral route of administration (of dydrogesterone) is associated with higher tolerability than other routes in luteal phase defect[1,2]

About **10.5%** of patients report **vaginal discharge or irritation with MVP**

Dydrogesterone has a significantly **more acceptance rate due to better tolerability compared to MVP (p<0.05)**

Patient tolerability is higher when **longer treatment** required with dydrogesterone



CONCLUSION

Dydrogesterone is a front-line standard in fresh IVF cycles and its oral route confers higher tolerability than other routes in luteal phase defect.

References

1. Griesinger G, Blockeel C, Tournaye H. Oral dydrogesterone for luteal phase support in fresh in vitro fertilization cycles: a new standard? *FertilSteril.* 2018;109(5):756-762.
2. Chakravarty BN, Shirazee HH, Dam P, Goswami SK, Chatterjee R, Ghosh S. Oral dydrogesterone versus intravaginalmicronised progesterone as luteal phase support in assisted reproductive technology (ART) cycles: results of a randomised study. *J Steroid BiochemMol Biol.* 2005;97(5):416-20.
3. Ganesh A, Chakravorty N, Mukherjee R, Goswami S, Chaudhury K, Chakravarty B. Comparison of oral dydrogestrone with progesterone gel and micronized progesterone for luteal support in 1,373 women undergoing in vitro fertilization: a randomized clinical study. *Fertil Steril.* 2011;95(6):1961-5.
4. Barbosa MWP, Valadares NPB, Barbosa ACP, Amaral AS, Iglesias JR, Nastri CO, Martins WP, Nakagawa HM. Oral dydrogesterone vs. vaginal progesterone capsules for luteal-phase support in women undergoing embryo transfer: a systematic review and meta-analysis. *JBRA Assist Reprod*. 2018;22(2):148-156.

ALTIS

In Recurrent Pregnancy Loss, Threatened Abortion & Infertility due to Luteal Phase Insufficiency

Dydrosure

Dydrogesterone 10 mg Tab.

— Better for sure —

5.6 times better oral **bioavailability**[1]

2 times reduction in the risk of miscarriages[4]

1.5 times better **affinity to Progesterone Receptors**[2]

44% better **pregnancy rate** in Luteal Phase Defect[5]

Up to 20 times more **Potent**[3]

Better Patient **Satisfaction rate** with **less side effects**[6]

1. Stanczyk FZ, et al. Endocr Rev 2013; 34(2):171-208 • 2. Indian Journal of Obstetrics and Gynecology Research 2016;3(2):157-166 • 3. Endocr Rev. 2013 Apr; 34(2): 171–208 • 4. Gynecol Endocrinol 2007;23:68–72 • 5. Gynecol Endocrinol, 2016; 32(2): 97–106 • 6. Iran J Reprod Med. 2015 Jul; 13(7): 433–438. •
*PB – Photon Bombardment

INDICATIONS AND DOSAGE: Infertility as a result of corpus luteum insufficiency, Threatened abortion, Habitual abortion. Please refer full prescribing information. FOR FURTHER INFORMATION. DOSAGE AND METHOD OF ADMINISTRATION: Infertility as a result of corpus luteum insufficiency: 1 tablet of Dydrogesterone a day from the 14th to the 25th day of the cycle. Treatment should be continued for at least 6 consecutive cycles. It is advisable to continue this treatment for the first months of any pregnancy at dosages as indicated for habitual abortion. Threatened abortion: Starting dose: 4 tablets of Dydrogesterone at once followed by 1 tablet of Dydrogesterone mg every 8 hours. Dosages of 10 mg several times a day should be spread over the day. It is recommended that treatment should start at the highest dose. If the symptoms persist or recur during the treatment, the dose should be increased by 1 tablet of Dydrogesterone every 8 hours. The effective dose should be maintained for one week after symptoms have ceased; it can then be gradually reduced. If the symptoms recur, the treatment should be resumed immediately at the effective dose. Habitual abortion: 1 tablet of Dydrogesterone a day up to the 20th week of pregnancy; the dose can then be gradually reduced. Treatment should preferably be started before conception. If the symptoms of threatened abortion occur during treatment, treatment should be continued as described for that indication. CONTRAINDICATION: hypersensitive to the active substance or to any of the excipients, have a known or suspected progestogen dependent neoplasm, have undiagnosed vaginal bleeding, are using this medicine to prevent endometrial hyperplasia, specifically if also taking oestrogens. WARNINGS AND PRECAUTIONS: The cause of abnormal bleeding must be investigated before prescribing this medication. Treatment with Dydrogesterone has infrequently been associated with alterations in liver function, sometimes accompanied by clinical symptoms. If known case of acute liver disease, or has a history of liver disease, Dydrogesterone to be given after careful evaluation. This is particularly necessary, if liver function tests continue to be abnormal. In cases of severe hepatic impairment stop the treatment. Some people experience breakthrough bleeding when treated with Dydrogesterone. ADVERSE EFFECTS: most common are headache, migraine, nausea, menstrual irregularities, and breast tenderness. DRUG INTERACTIONS: Dydrogesterone is metabolised by CYP3A4 and 2C19. Metabolism is increased by phenobarbital, phenytoin, carbamazepine, rifampicin, rifabutin, nevirapine, efavirenz, etc. Ritonavir and nelfinavir also act as enzyme inducers when used concomitantly with steroid hormones. USE IN SPECIAL POPULATION: Not be used during lactation. Not recommended for use in children and adolescents (< 18 years). PRESENTATION: Dydrosure 10 mg film coated tablets. Blister pack of 1*10 Tablets. Please refer full prescribing information. FOR FURTHER INFORMATION, CONTACT: Medical Affairs; Alkem House; Senapati Bapat Marg, Lower Parel; Mumbai, Maharashtra: 400 013. For detail information please refer detailed prescribing information of Dydrogesterone.