

Stimulating the Ovaries for IVF Treatment



Question: What is the best drug regime to stimulate the ovaries for IVF?

There is a wide range of drug regimes used, often unique to a particular clinic. In general terms, the ovaries may be switched off prior to stimulation (GnRH agonist), they are stimulated using gonadotrophins (FSH with or without LH) to make multiple follicles, which contain the extra eggs required for IVF. Measures are taken to prevent premature release of the eggs before they can be collected (GnRH agonist or antagonist).

The BFS Policy and Practice committee reviewed the published evidence and made the following recommendations:

- There is insufficient evidence to recommend one type of gonadotrophin (FSH) preparation over another to stimulate egg development. The choice will therefore be dependent on cost, availability and convenience of use.
- In a cycle using recombinant FSH (rFSH) for stimulation of the ovaries for IVF, there is a potential benefit in supplementing with LH in women over 35 years or those who have low ovarian reserve. There is no evidence of benefit to an unselected group.
- There is no evidence that either the antagonist or agonist protocols for IVF cycles is superior in general terms.

- There is evidence that the antagonist protocol reduces the risk of ovarian hyperstimulation syndrome in women who are high responders (i.e. producing too many follicles) and therefore it is recommended for treatment where this is a suspected or known risk.
- There is insufficient evidence to recommend the antagonist over the agonist protocol in low responders (i.e. producing too few follicles).
- There is some evidence that prolonged use of agonist (3-6 months) prior to ovarian stimulation may be beneficial to the outcome of treatment in women with active endometriosis.
- The use of the combined oral contraceptive pill to schedule antagonist cycles may have a negative effect on success and therefore the practice is not recommended.

The policy and practice documents relating to this topic were published in the BFS journal Human Fertility and the full reference is:

Nardo, LG., Bosch, E., Lambalk, CB., and Gelbaya, TA (2013) Controlled ovarian hyperstimulation regimens: a review of the available evidence for clinical practice. Produced on Behalf of the Policy and Practice Committee. Human Fertility 16: 144-150.

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