

# Enhancing Success With ART

CHANGE

## Question: Is there anything we can do to improve our chance of having a baby with IVF?

To answer this question the BFS Policy and Practice committee reviewed the various strategies that have been proposed to potentially enhance the success of IVF.

Data suggests that the most important factor affecting the success rate of IVF treatment is the biological age of the eggs (normally the age of female partner or egg donor).

A variety of drugs to stimulate the ovaries have been developed to maximise the chances of obtaining high quality eggs, but there is little fundamental difference between them.

However, extra treatments are sometimes offered by doctors in an attempt to enhance the chances of IVF success. These are called adjuvants and are usually based on a rational idea, but are yet to be proven as effective and safe.

Adjuvants include:

- Immunomodulators – considered to affect the immunology around implantation including the possible effects of endometrial natural killer cells (e.g. Intravenous immunoglobulin, TNF- $\alpha$ , intralipid, corticosteroids);
- Vasodilators – considered to improve blood flow to the lining of the womb (e.g. Viagra, nitroglycerine and nitrous oxide);
- Uterine muscle relaxants – used to try to reduce the potential effects of muscle contractions in the womb (e.g. Progesterone, nitroglycerine,  $\beta$ -blockers);
- Drugs used to try to enhance development of womb lining (e.g. Aspirin, low molecular weight heparin, oestrogen);
- Drugs used to try to improve ovarian response to treatment (e.g. Growth hormone, DHEA);
- Metformin used to try to improve the outcome in women with polycystic ovarian syndrome (PCOS) undergoing IVF.

Following detailed reviews of the scientific evidence relating to each of these adjuvant treatments, it is the recommendation of the British Fertility Society that they are unproven.

The British Fertility Society recommends that these adjuvant treatments should only be offered as part of a clinical trial.

It is recommended that any doctor choosing to offer them as treatments outside a clinical trial should only do so after full discussion of the available evidence and the potential risks.

The full scientific details of this policy are scheduled for publication in the BFS journal Human Fertility toward the end of 2014. Prepared for the UK Professional Fertility Societies by the British Fertility Society.