

## PENINSULAR CENTRE FOR REPRODUCTIVE MEDICINE

### REGIME FOR ANTIPHOSPHOLIPID SYNDROME:

Women undergoing assisted conception treatments at the Exeter Fertility Clinic are tested for a subtle immune condition called 'antiphospholipid syndrome'. This condition has been recognised as a possible common cause for treatment failure and is unlikely to cause other problems or symptoms for the woman except that it is also associated with an increased tendency to miscarry. One possible exception to this is that there may be an increased chance of blood clotting problems with surgery and certain drugs (e.g. the contraceptive pill) and the condition should be mentioned to the doctor responsible for treatment before surgery or starting medication.

The syndrome causes minor problems with a system within the body called the 'Plasminogen Activation (PA)' system. This system is involved in processes which enable the body to dissolve its own tissues e.g. dissolving blood clots, allowing the embryo to dissolve its way into the wall of the womb, release of the egg from the ovary, allowing sperm to dissolve their way through barriers around the egg, and many others.

Certain common drugs and medicines which are known to affect blood clotting (particularly Aspirin and Heparin) work by their influence on the PA system and have been found to be of benefit to women with antiphospholipid syndrome both with regards to successful conception and also the prevention of miscarriage. Both of these drugs have been used during pregnancy for other conditions for many years, particularly to improve blood flow to the placenta for babies that grow poorly and also to treat women who have a high risk of blood clotting (thrombosis).

The doses of aspirin and heparin required to treat antiphospholipid syndrome are quite small and less than that necessary to thin the blood enough to cause significantly increased risk of bleeding or other side-effects.

Aspirin is taken by mouth in a dose of 75 mg per day which is one quarter of a standard adult tablet (300 mg). The easiest way to take it is to dissolve one standard soluble aspirin (300 mg) tablet in a glass of water and to drink a quarter. Heparin has to be given by injection. A common way is to give a type of heparin called Dalteparin ('Fragmin') in a dose of 2,500 units once a day and it is administered in much the same way that the ovulation induction injections are given.

In mild or borderline cases aspirin alone may be recommended prior to conception but heparin added after pregnancy has been diagnosed. In others both the aspirin and heparin are started on the same day as the ovulation induction injections and are continued right up until either the woman's period starts if the treatment was unsuccessful or else twelve weeks into the pregnancy (when the main risk of miscarriage is passed). The heparin is usually discontinued at this stage, but the aspirin may be continued right up until the baby is due.