

Intralipid Infusions and IVF

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What is Intralipid?

Intralipid is a solution of fat given as an intravenous infusion (drip). It contains a mixture of soy bean oil, egg components, and glycerin. Intralipid is primarily used as a way of providing nutrition in ill patients who cannot eat, or absorb food.

Intralipid is known to have immune modifying properties, and is the main treatment for patients who have an adverse reaction to local anaesthetics.

There has been a great deal of interest in whether Intralipid might also play a role in IVF and fertility treatment.

What is Intralipid thought to do?

It is likely that in a small number of cases where pregnancy does not occur with IVF treatment, the 'immune environment' of the uterus is altered. Intralipid has been shown to have an effect that suppresses the activity of natural killer cells in the body. For this reason, many women have been offered Intralipid when the transfer of healthy embryos does not lead to ongoing pregnancy.

Does Intralipid actually work in IVF?

Large studies of the use of Intralipid in IVF have shown disappointing results. A study of over 11000 women undergoing IVF in Australia found that there was no difference in the chance of pregnancy in women who underwent an Intralipid infusion as part of their IVF cycle. The authors of the study* concluded that:

“Intralipid should not be advocated for as a beneficial therapy and future use should only be as part of a [scientific study]. The safety of Intralipid also needs investigation.”

*Shirlow *et al.* The effect of intralipid on pregnancy rates in IVF. *Fertility and Sterility* 2016; 106 (3): e337-338.



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