

Short communication

Single embryo transfer: the role of natural cycle/minimal stimulation IVF in the future



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Abstract

There are several good reasons to assume that single embryo transfer (SET) eventually will become the norm internationally in IVF treatments. A tendency is clearly visible, as demonstrated in the latest IVF World Report. The Nordic countries and Belgium have been leading the way. Sweden at present has 70% SET, with 5% twins and a pregnancy rate per transfer remaining constant at about 30%. As a consequence, recent data show a drastic reduction of the risk of prematurity and therefore of child morbidity and perinatal mortality. It is now time to discuss alternatives to the current clinical policy of quite an aggressive ovarian stimulation in settings where SET is the norm. When and at what proportion could natural cycle/soft stimulation be used? What group of patients would benefit? What will the consequences be in terms of efficacy, safety, cost, time and quality of life? Selection of the most beneficial, rather than the most aggressive, ovarian stimulation protocol by clinicians and by the couples themselves in the future may well include a much wider use of natural cycle/soft stimulation in IVF.

Keywords: embryo freezing, IVF, natural cycle, ovarian stimulation, single embryo transfer

A short summary of a lecture on current trends and a prognosis

There are several good reasons to assume that single embryo transfer (SET) eventually, will become the norm internationally in IVF treatments. Current medical, psycho-social, economic data and trends and, indeed, recent national data on maintained clinical efficacy with 'SET as the norm', all speak the same language. The pace at which SET has been introduced so far, has not been internationally uniform but the tendency is clearly visible, as demonstrated in the latest IVF World Report (Adamson *et al.*, 2000). The Nordic countries and Belgium have been leading the way and countries like the UK, Holland and others now follow.

Sweden, since a couple of years back, performs on a national basis 70% SET, with 5% twins and a pregnancy rate per transfer remaining constant at about 30%. As a consequence, recent data show a drastic reduction of the risk of prematurity and therefore of child morbidity and perinatal mortality.

These developments, with a drastic revision of clinical policies in IVF, have not yet led to any revision or even much discussion of the current practice of strong and quite aggressive ovarian stimulation. On the contrary, strong stimulation is still the norm, with an increasing emphasis on freezing and thawing procedures, which have even been described as a prerequisite for a functional SET policy.

It is now time to discuss alternatives to aggressive ovarian stimulation in settings where SET is the norm. When and at what proportion could natural cycle/soft stimulation be used? What group of patients would benefit? What will the consequences be in terms of efficacy, safety, cost, time and quality of life? How should we best look at outcomes in terms of efficacy, safety, and quality and how should we adapt our reporting?

The availability, perhaps in the near future, of much more efficient methods for selecting a viable and healthy embryo through 'metabolomics' and other techniques, together with the advent of new methodologies to quantify 'quality of life' in a meaningful way, may lead to a rapid transition to SET as the norm. Selection of the most beneficial, rather than the most aggressive, ovarian stimulation protocol by clinicians and by the couples themselves may well in the future include a much wider use of natural cycle/soft stimulation in IVF.

Reference

Adamson G, Lancaster P, De Mouzon J 2000 ICMART World Collaborative Report on In Vitro Fertilization. *Fertility and Sterility* **84**, S107–S107.

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