

International Federation of Fertility Societies

Global Standards of Infertility Care

Standard 8

Reducing the incidence of multiple pregnancy following treatment for infertility

Name	Reducing the incidence of multiple pregnancy following treatments for infertility
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Author	Standards and Practice Committee; Lead author: Richard Kennedy
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Introduction

The goal of IFFS Practice Standards is to provide policy and decision-makers and the clinical and scientific community with a set of recommendations that can be used as a basis for developing or revising institutional or national guidelines on selected practice recommendations for infertility practice.

The document addresses minimal standards of practice but does not provide rigid guidelines but rather gives recommendations that provide the basis for rationalizing the provision of infertility services in view of the most up-to-date information available.

Because country situations and programme environments vary so greatly, it is inappropriate to set firm international guidelines on infertility practice. However, it is expected that institutional and national programmes will use these guidance documents for updating or developing their own infertility guidelines in the light of their national health policies, needs, priorities and resources. The intent is to help improve access to, quality of, and safety of infertility and assisted conception services. These improvements must be made within the context of users' informed choice and

medical safety. Adaptation is not always an easy task and is best done by those well-acquainted with prevailing health conditions, behaviours, and cultures.

Rationale

Multiple pregnancy is a well recognised adverse consequence of treatment for infertility^{1,2}. Whilst efforts in a number of countries have been successful in reducing the incidence of high order multiple pregnancies, the incidence of twins continues to be a problem. The numbers of multiple pregnancies resulting from ovulation induction³, intra uterine insemination with ovarian stimulation and IVF/ICSI is a major public health concern placing significant burdens on health resources^{4,5}. Multiple pregnancy significantly increases the risk of maternal and infant morbidity and mortality⁶.

Scope of this guidance

This guidance covers all forms of assisted conception including IVF and related treatments, including the use of donor gametes, intra uterine insemination in combination with ovarian stimulation and ovulation induction for anovulatory infertility. It is applicable to all clinicians practising in infertility.

Recommendation for Practice

Pre-treatment advice

All patients should be given verbal and written information about the likelihood of multiple pregnancy following infertility treatment, what the risks of multiple pregnancy are to both mother and baby and how treatment will be modified to reduce the incidence of multiple pregnancy.

Ovulation induction⁷ (meaning the induction of ovulation for the treatment of anovulation)

1. Optimum response in ovulation induction for failure of ovulation without associated assisted reproduction is the development of a single mature ovarian follicle.

2. Women prescribed clomiphene, other anti oestrogens and gonadotrophins, should be advised of the possibility of multiple pregnancy resulting from this treatment.

Because of the unpredictability of response and consequent risk of multiple pregnancy optimum monitoring is by ultrasound.

3. Ovulation induction using gonadotrophins should always be monitored by ultrasonography to assess follicular development.
4. Practitioners should be aware of the possibility of intermediate sized follicles producing mature oocytes.

Intrauterine insemination⁸ with ovarian stimulation (also known as IUI/Controlled ovarian stimulation or IUI/superovulation)

1. Women and their partners undergoing intra-uterine insemination planned with ovarian stimulation should be advised about the possibility of multiple pregnancy, including high order multiples.
2. If ovarian stimulation is used together with intrauterine insemination, monitoring of follicular response should be undertaken with ultrasound.
3. Practitioners should be aware of the possibility of intermediate sized follicles as they may release competent oocytes increasing the risk of multiple pregnancy.

IVF and related forms of assisted conception^{9,10,11,12,13,14}

1. Practitioners should adopt strategies that reduce multiple pregnancy whilst maintaining pregnancy rates following IVF and related treatments.
2. Single embryo transfer should be considered in good prognostic patients, based on factors including embryo quality, age of patient and previous IVF outcomes.
3. Women and their partners undergoing IVF and other treatments involving the placement of more than one embryo should be advised about the possibility of multiple pregnancy, including triplets and higher order multiples.
4. Effective embryo cryopreservation programmes and procedures for selecting embryos with optimal implantation potential should be adopted alongside single embryo replacement in order to optimise the possibility of a pregnancy from a single fresh IVF cycle.
5. The principles outlined above apply equally to the replacement of fresh and frozen embryos.

References

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