SUBFERTILITY

(Defined as involuntary failure to conceive within 12 months with regular coitus)

Clients attending with fertility concerns should have a medical, drug, menstrual, contraception, social and sexual history plus the following discussion:

- Length of time the client has been trying to conceive (>80% couples will conceive within 1 yr if the woman is under 40 years, >90% will conceive within 2 years)
- Coital frequency, any sexual problems
- Partner's medical history (including testicular problems/surgery), drug, social, family history and whether fathered any pregnancies
- Appropriate knowledge of how to conceive
- Advise folic acid supplementation – 400 micrograms tablet daily

  (Women with a BMI >30 or higher risk of NTD need a 5mg tablet available on prescription from their GP (see Sandyford Preconceptual Care protocol)
- Lifestyle factors for both partners (see Factors Affecting Fertility in appendix and Sandyford Preconceptual Care protocol)
- Offer STI screening (Chlamydia test required before tubal patency tests, full screen required for IVF)
- Check rubella serology or advise to attend GP practice for test
- Weight (see Factors Affecting Fertility in appendix)

  - Optimal BMI 20-25

  - Subfertility treatment within NHS GGC restricted to those with BMI < 30

  - If BMI ≥ 35 consider referral to GGC weight management service, advise delaying conception until weight reduced

If the client wishes to pursue further investigations or treatment after 12 months of subfertility, referral to a gynaecology clinic should be made, either at Sandyford Central or a local Hub if available. Encourage clients to attend with their partner if possible. Within Sandyford Gynaecology Services, fertility investigations include:

- Seminal analysis (male partner must either register with Sandyford or have test through GP)
- Hormone profiling
- Confirmation of ovulation
- HyCoSy tubal patency scan

Ovulation induction may be offered as appropriate.

Early referral is appropriate for women who are 36 years or over, or where there is a known clinical cause of infertility or a history of predisposing factors for infertility.

Single women and same sex couples:

Stonewall.org.uk has information on parenting options (e.g. donor insemination, surrogacy and adoption), practical and legal considerations.

Lesbian couples can be referred to NHS assisted conception services providing they are within the service's criteria for assisted conception.

Single women are not eligible for NHS assisted conception.

Clients with Blood Borne Virus Infection:

Decisions about fertility management should involve discussions between the couple, a fertility specialist and an HIV specialist.

Where the woman is HIV positive couples may conceive by artificial insemination.

Where the male partner is HIV positive, timed unprotected vaginal intercourse may be advised if the man has an undetectable viral load for more than 6 months, is compliant with antiretroviral medication and there are no other infections.

If sperm washing or assisted conception is required clients should be referred initially to the Assisted Conception Service, Glasgow Royal Infirmary, where they will then be referred on to Ninewells Hospital, Dundee.

Private Fertility Treatment

Patients undergoing fertility investigations within the private sector may attend our services requesting some tests. Unfortunately we can no longer provide this service for these clients, unless the tests are clinically indicated for another reason.

Patient Information

http://publications.nice.org.uk/assessment-and-treatment-for-people-with-fertility-problems-ifp156/trying-for-a-baby

[Accessed 11 June 2013]

References

National Institute for Health and Care Excellence. Clinical Guideline CG156 Fertility: Assessment and Treatment for people with Fertility Problems. February 2013.

http://www.nice.org.uk/nicemedia/live/14078/62770/62770.pdf

[Accessed 11 June 2013]

NHS Greater Glasgow and Clyde Core Brief 15 May 2013

http://www.staffnet.ggc.scot.nhs.uk/Corporate%20Services/Communications/Briefs/Pages/comms_CoreBrief-15May2013_mb150513.aspx

[Accessed 11 June 2013]

APPENDIX

NICE Fertility Guideline 2013: Factors Affecting Fertility

[C1] Alcohol
- Women who are trying to become pregnant should be informed that drinking no more than 1 or 2 units of alcohol once or twice per week and avoiding episodes of intoxication reduces the risk of harming a developing fetus.
- Men should be informed that alcohol consumption within the Department of Health's recommendations of 3 to 4 units per day for men is unlikely to affect their semen quality.
- Men should be informed that excessive alcohol intake is detrimental to semen quality.

[C2] Smoking
- Women who smoke should be informed that this is likely to reduce their fertility.
- Women who smoke should be offered referral to a smoking cessation programme to support their efforts in stopping smoking.
- Women should be informed that passive smoking is likely to affect their chance of conceiving.
- Men who smoke should be informed that there is an association between smoking and reduced semen quality (although the impact of this on male fertility is uncertain), and that stopping smoking will improve their general health.

[C3] Folic acid supplementation
- Women intending to become pregnant should be informed that dietary supplementation with folic acid before conception and up to 12 weeks' gestation reduces the risk of having a baby with neural tube defects. The recommended dose is 0.4 mg per day. For women who have previously had an infant with a neural tube defect or who are receiving anti-epileptic medication or who have diabetes (see Diabetes in pregnancy, NICE clinical guideline 63), a higher dose of 5 mg per day is recommended.

[C4] Obesity
- Women who have a body mass index (BMI) of 30 or over should be informed that they are likely to take longer to conceive.
- Women who have a BMI of 30 or over and who are not ovulating should be informed that losing weight is likely to increase their chance of conception.
- Women should be informed that participating in a group programme involving exercise and dietary advice leads to more pregnancies than weight loss advice alone.
- Men who have a BMI of 30 or over should be informed that they are likely to have reduced fertility.

[C5] Low body weight
- Women who have a BMI of less than 19 and who have irregular menstruation or are not menstruating should be advised that increasing body weight is likely to improve their chance of conception.

[C6] Tight underwear
- Men should be informed that there is an association between elevated scrotal temperature and reduced semen quality, but that it is uncertain whether wearing loose-fitting underwear improves fertility.

[C7] Occupation
- Some occupations involve exposure to hazards that can reduce male or female fertility and therefore a specific enquiry about occupation should be made to people who are concerned about their fertility and appropriate advice should be offered.

[C8] Prescribed, over-the-counter and recreational drug use
- A number of prescription, over-the-counter and recreational drugs interfere with male and female fertility, and therefore a specific enquiry about these should be made to people who are concerned about their fertility and appropriate advice should be offered.

[C9] Frequency and timing of sexual intercourse or artificial insemination
- People who are concerned about their fertility should be informed that vaginal sexual intercourse every 2 to 3 days optimises the chance of pregnancy.
- People who are using artificial insemination to conceive should have their insemination timed around ovulation.

Access Criteria for NHS Funded IVF Treatment for patients in all NHS Boards in Scotland from 1 July 2013

Referral for treatment can be made if **all** access criteria are fulfilled, as noted below.

Definition of infertility for couples

Infertility with an appropriate cause, of any duration

OR

Unexplained infertility of two years – heterosexual couples

Unexplained infertility following six-eight cycles of donor insemination – same sex couples

Sterilisation

Neither partner to have undergone voluntary sterilisation or who have undertaken reversal of sterilisation.

Stable Relationship

Couples must have been co-habiting in a stable relationship for a minimum of two years.

Children in the home

Couples must have no child living with them in their home.

Lifestyle*

There is a responsibility on patients to follow these access criteria listed below***** which are in the interest of the welfare of the child and the effectiveness of treatment. Clinicians may conduct testing to ensure that patients adhere to the criteria and in the event of a positive test, patients will not be given treatment.

Body Mass Index (BMI)*

The female partner must have a BMI above 18.5 and below 30. Couples should be

aware that a normal BMI is best for both partners.

Smoking*

Smoking status must be assessed prior to referral for treatment and again in the tertiary centre before treatment commences.

Both partners' must be non-smoking for at least three months before treatment and

couples must continue to be non-smoking during treatment.

Alcohol and Drugs*

- Both partners must abstain from illegal and abusive substances
- Both partners must be Methadone free for at least one year prior to treatment
- Neither partner should drink alcohol prior to or during the period of treatment

Couples added to the waiting list prior to 1 July 2013, but who do not meet criteria will be placed on a holding list for 12 months. If necessary lifestyle changes are made during this period, the couple will resume their place on the waiting list.

Definition of one full cycle of IVF

One fresh cycle includes ovulation induction, egg retrieval, fertilisation, transfer of fresh embryos followed by the freezing of suitable embryos and the subsequent replace of these,
provided the couple still fulfil all access criteria. If suitable embryos are frozen these should be transferred before the next stimulated treatment cycle.
No individual (male or female) can access more than the number of NHS funded IVF treatment cycles supported by NHS Scotland under any circumstances, even if they are in a new relationship.

Number of cycles initiated by the date of the female's 40th Birthday

Up to two cycles of IVF/ICSI may be undertaken where there is a reasonable expectation of a live birth. Clinical judgement should be used to determine this, using an assessment of ovarian reserve before the first cycle and if there has been no or poor response to ovarian stimulation (<3 eggs retrieved) no further IVF/ICSI treatment will be funded.
Fresh treatment cycles must be initiated by the date of the female partners 40th birthday. If you turn 40 during your first fresh cycle of treatment, no further fresh cycles will be offered.
The treatment cycle, **including all Frozen Embryo transfers,** must be completed within 12 months of starting treatment or before the date of the female partners 41st birthday if this is reached first.
Patients should not be placed at the end of the waiting list following an unsuccessful treatment cycle. There could be a gap of 6-11 months between cycles of IVF for patients who remain eligible.
Patients are not eligible for further NHS treatment (fresh or frozen treatment) cycles if they have a live birth from treatment.

Frozen Embryos

Should circumstances change and couples no longer meet the NHS eligibility criteria (e.g. live birth, age) self-funding for any future transfers will be required.

Criteria will be reapplied after each fresh and frozen treatment cycle.

Patients who have previously self-funded

NHS funding may be given to those patients under the age of 40 who have previously paid for IVF treatment**, if in the treating Clinician's view, the individual clinical circumstances warrant further treatment.**

Single embryo transfer

Patients with a good prognosis (usually those aged up to 37) are expected to have single embryo transfer, and this will be discussed with you at clinic appointments. The single biggest risk of fertility treatment is multiple pregnancy. Further information can be found in Infertility Network Scotland's factsheet which can be downloaded at: http://www.infertilitynetworkuk.com/uploaded/Fact%20Sheets/INS%20SET%20Patient%20Factsheet%20July%202013.pdf or ask staff at your clinic for a copy.

Couples where the female partner is aged 40 – 42

In very specific circumstances, couples who have not conceived after 2 years of regular unprotected intercourse may be offered one cycle of treatment where the female partner is aged from the day after her 40th birthday to 42. The treatment cycle, **including all Frozen Embryo Transfers,** must be complete within 12 months of starting treatment. All of the following criteria must be met:

- No previous IVF treatment before (NHS or private)
- There is no evidence of poor ovarian reserve and if, in the treating Clinician's view it is in the patients' interest.
- Robust discussion regarding the additional implications of IVF and pregnancy at this age must be undertaken.