



flindersfertility

Fertility Assessment & Management Guide



Personalised Care | Specialised Treatment

Fertility Assessment and Management

History		Examination
<p>Couple</p> <ul style="list-style-type: none"> • Duration of infertility • Coital frequency <p>Male</p> <ul style="list-style-type: none"> • Age • Paternity hx • PMHx/PSHx <ul style="list-style-type: none"> - Genitalia injury - Genital infection - Surgery - Recurrent respiratory infection • Meds & allergy <ul style="list-style-type: none"> - Steroids - Azothiaprine • Drugs/alcohol/smoking • Occupation/social 	<p>Female</p> <ul style="list-style-type: none"> • Age • Menstrual hx <ul style="list-style-type: none"> - LMP - Cycle: days & regularity - Bleeding: duration/IMB/PCB - Pain: constant/period/sex • PGHx <ul style="list-style-type: none"> - Ovarian/uterine disorders - PCOS: acne/hirsutism/PCO - Endometriosis - STIs - PAP • POHx: gravidy/parity <ul style="list-style-type: none"> - Miscarriages - Terminations - Ectopics - Caesarean section - Complications • PMHx/PSHx: • Family Hx <ul style="list-style-type: none"> - Infertility/miscarriage/POF - Genetic disorder/cancer • Meds & allergy <ul style="list-style-type: none"> - Hormonal drugs - Antiepileptics/warfarin/ACEI • Drugs/alcohol/smoking <ul style="list-style-type: none"> - Occupation/social 	<p>Female</p> <ul style="list-style-type: none"> • Weight, Height, BMI • Acne/hirsutism • Breast ex • Pelvic ex • Speculum ex + PAP + STI swabs • Look out for <ul style="list-style-type: none"> - Offensive vaginal discharge - Galactorrhoea - Virilising signs: clitoromegaly, hoarse voice <p>Male</p> <ul style="list-style-type: none"> • Weight, Height, BMI • Genitalia <ul style="list-style-type: none"> - Penis - Testes & vas - Varicoses & inguinal hernia • Look out for <ul style="list-style-type: none"> - Gynaecomastia - Sparse hair distribution

Investigations	Management	Referral to Fertility specialist
<p>Female</p> <ul style="list-style-type: none"> • Bloods <ul style="list-style-type: none"> - D3: FSH, LH, E2 (only if period irregular or infrequent) - D21: progesterone • Repeat weekly until next period if cycle ≥ 35 days but < 42 days <ul style="list-style-type: none"> - AMH - TSH, prolactin (only if period irregular) - Androgen: Testosterone, SHBG, FAI, 17OH-Prog (if period irregular; obesity; clinical hyperandrogenism) - Prepregnancy screening: • blood group, • HBV/HCV • HIV • rubella serology • OGTT (if obese) • Imaging: 1st week of menstrual cycle <ul style="list-style-type: none"> - Pelvic USS incl TVS - Hysterosalpingogram (after semen analysis, D21-progesterone test & STI swabs, US and pelvic exam were normal) <p>Male</p> <ul style="list-style-type: none"> • Semen analysis <ul style="list-style-type: none"> - Repeat after 3 months if mildly abnormal 	<p>Couple</p> <ul style="list-style-type: none"> • Regular intercourse: 2-3x/week • Lifestyle modifications <ul style="list-style-type: none"> - Diet/exercise to achieve BMI 20-30 - Stop smoking/THC/drugs - Minimise alcohol (< 2 sd/week) - Stress minimisation: sleep/work/sport - Information about alternative medicine & environmental hazards • Counselling (if no obvious cause of infertility): <ul style="list-style-type: none"> - Explain fecundity rate 20% per cycle; cumulative preg rate 84% in 1st year, 92% in 2nd year - Persist for a total of 24 months; 12 months if maternal age > 30 - Discourage use of LH detection kits or BBTC <p>Female</p> <ul style="list-style-type: none"> • Folic acid 0.5mg/d • BMI > 40: referral to dietician & personal trainer • Abnormal TSH/prolactin: referral to endocrinologist • Others: rubella vaccination, PAP <p>Male</p> <ul style="list-style-type: none"> • Menevit if semen analysis abnormal • repeat 3/12 +/- referral to fertility clinic 	<ul style="list-style-type: none"> • Duration of infertility • > 6 mths if woman's age ≥ 38 • > 12 mths if woman's age < 38 • Oligo/amenorrhoea • unusual pelvic pain • dysmenorrhoea • dyspareunia • Prior treatment for cancer • Previous tubal ligation or vasectomy • Recurrent miscarriages ≥ 3 • Genetic disorders • AMH < 10 • USS: ovarian lesion, hydrosalpinx, large fibroid • HSG: blocked fallopian tube, intrauterine lesion • Semen analysis: severe oligospermia (concentration $< 10 \times 10^6/\text{ml}$) or • azoospermia <p>Checklist for referral</p> <ul style="list-style-type: none"> • Referral letter: summary • Copies of all investigation results and previous surgical reports

Algorithm for Management of Subfertile Couple

Initial assessment

Couple

- Age
- Durations of infertility

Female

- Menstrual hx
- PGHx/POHx, PAP
- PMHx/PSHx
- Family Hx
- Meds/allergy
- Drugs/alcohol/smoking

Male

- PMHx/PSHx
- Genitalia trauma/surgery/infection
- Family Hx
- Meds: steroid
- Drugs/alcohol/smoking

Exam

- Couple: BMI
- Female: PAP, STI swabs, pelvic exam
- Male: genitalia only if hx suggestive

Next step

Female Ix

- Blood tests
 - D21: progesterone
 - AMH
 - Bld grp, rubella, HBV/ HCV/ HIV serology
- If oligo/amenorrhoea
 - D3 FSH, LH, E2
 - TSH, prolactin
 - androgens/FAI
- If BMI>35: OGTT
- If pelvic pain or mass on exam: USS/TVS

Male Ix

- Semen analysis

Couple Advice

- Regular intercourse
- Lifestyle modifications
- Fertility counselling
- Folic acid for female

Consider referral to Fertility specialist if:

- Couple:
 - Genetic disorders
 - Prior treatment for cancer
- Female:
 - Age >35
 - Infertility >12-24mths
 - Significant gynae problems
 - Previous tubal ligation
 - Recurrent miscarriages ≥3
- Male:
 - Previous vasectomy

Follow-up visits

Tasks:

- Discuss results
- Established diagnosis
 - Unexplained infertility
 - Known infertility cause
- Management plan

Couple

- D21 prog, AMH and semen analysis normal
 - Organise HSG
 - Continue coital method for 6-12 months

Female

- D21 prog low: anovulation
 - Repeat D21 Prog
 - Check D3 FSH, LH, E2, TSH, prolactin, androgen, FAI if not already done
- AMH <10
 - Referral to Fertility specialist
- If D3 FSH, LH, E2; TSH, prolactin; androgens/FAI, OGTT abnormal
 - Consider referral to endocrinologist &/or fertility specialist
- If USS/TVS or HSG abnormal
 - Consider referral to gynaecologist or fertility specialist

Male

- Semen analysis abnormal
 - Repeat semen analysis in 3 mths
 - Start Menevit
 - Referral to fertility specialist

Referral Checklist

Couple profile

Summary

- Duration of infertility
- Relevant risk factors
- Abnormal findings
- Known causes of infertility

Attached copy

- Investigation results
- Relevant correspondence with other specialists
- Surgical report if any

Early specialist referral if:

- Anovulation
- AMH <10
- Abnormal USS/HSG
- Abnormal semen analysis
- female age \geq 38 years



Abbreviations

17OH-Prog	17-hydroxy progesterone
ACEI	angiotensin-converting enzyme inhibitor
BBTC	basal body temperature check
HSG	hysterosalpingogram
Hx	history
IMB	intermenstrual bleeding
LMP	last menstrual period
Meds	medications
PCB	postcoital bleeding
PCO	polycystic ovaries
PGHx	past gynaecological history
PMHx	past medical history
POHx	past obstetric history
POF	premature ovarian failure
PSHx	past surgical history
STIs	sexually transmitted infections
THC	marijuana
TVS	transvaginal scan
USS	ultrasound scan

References

- Lashen (2004); Investigations for infertility, *Curr Obstet Gynecol* 14:269-76
 RCOG (2004); Fertility assessment & treatment for people with fertility problems
 Speroff & Fritz (2010), *Clinical gynecologic endocrinology & infertility*, 8th ed

FERTILITY ASSESSMENT **IN VITRO FERTILISATION (IVF)**
OVULATION INDUCTION (OI) COUNSELLING & SUPPORT
SURROGACY **EGG, SPERM & EMBRYO STORAGE**
FERTILITY SERVICES FOR SAME SEX COUPLES AND SINGLE WOMEN
INTRAUTERINE INSEMINATION (IUI) **FERTILITY BANKING**
WELLBEING & FITNESS ENDOMETRIOSIS MANAGEMENT
TELEFERTILITY EGG & SPERM DONATION
TUBAL & UTERINE SURGERY **SURGICAL SPERM RECOVERY**
POLYCYSTIC OVARY SYNDROME (PCOS) MANAGEMENT
PRE-IMPLANTATION GENETIC DIAGNOSIS (PGD) AND PRE-IMPLANTATION GENETIC SCREENING (PGS)
INTRA CYTOPLASMIC SPERM INJECTION (ICSI)



flinders**fertility**

Flinders Medical Centre Level 4 Flinders Drive Bedford Park South Australia 5042
T: 131 IVF (131 483) | F: +61 8 8204 6299 | E: [enquire@flinders**fertility**.com.au](mailto:enquire@flindersfertility.com.au)

[www.flinders**fertility**.com.au](http://www.flindersfertility.com.au)

 **131 IVF** (131 483)