Dr Janene Brown

Obstetrician and Gynaecologist

Oxford Women's Health, Christchurch

Saturday, August 13, 2016

(Room 3)

11:00 - 11:55 WS #90: The Infertile Couple

12:05 - 13:00 WS #101: The Infertile Couple (Repeated)

THE INFERTILE COUPLE (FROM A GP PERSPECTIVE)

Dr Janene Brown

Gynaecologist

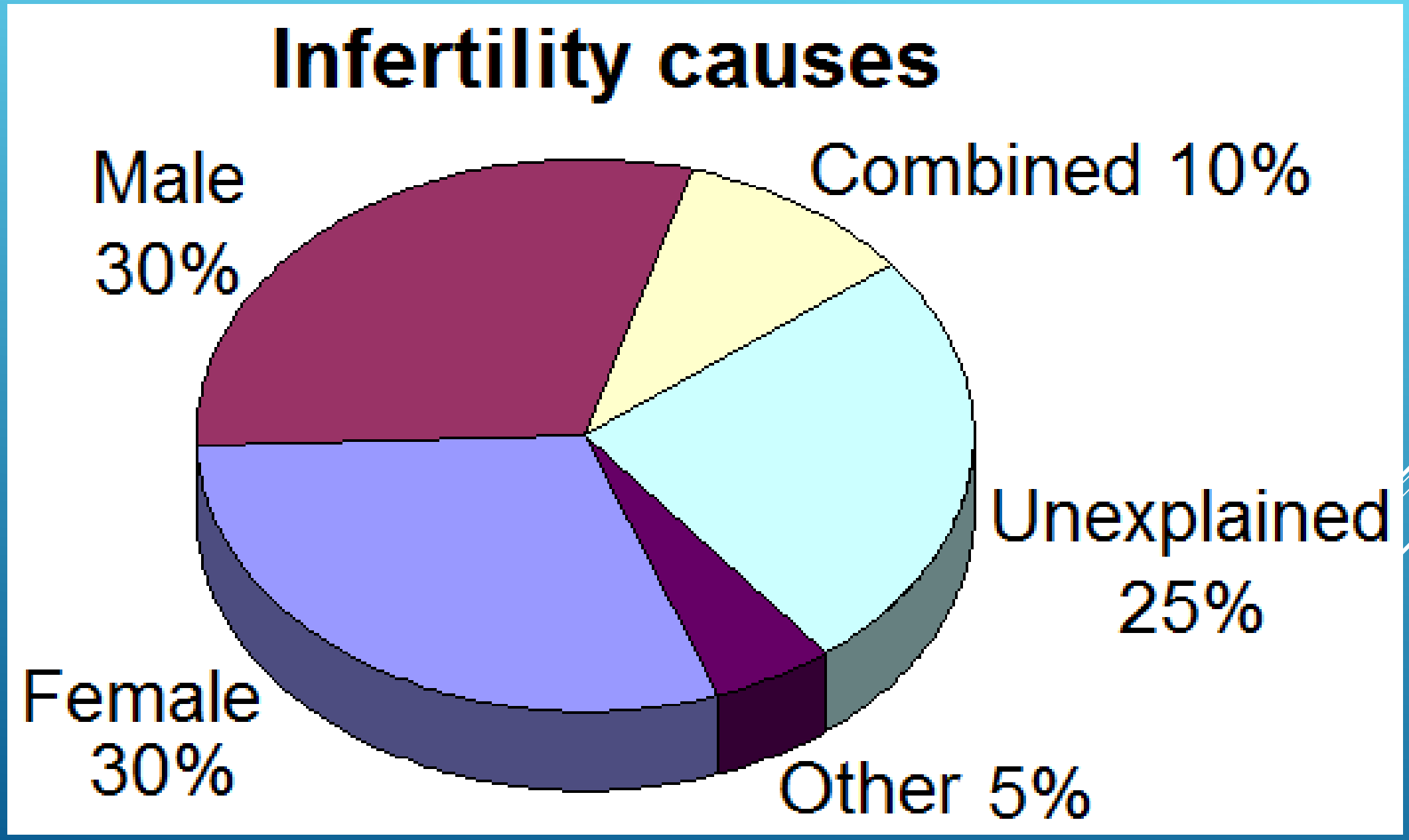
Oxford Womens Health

Genea Oxford Fertility

1/3 female

1/3 male

1/3 unexplained


Infertility causes
Male
30%
Combined 10%
Unexplained
25%
Female
30%
Other 5%

PARAMETER	NORMAL RANGE
Volume	≥ 1.5ml
Sperm concentration	≥ 15 million sperm / ml
Normal Morphology (shape)	≥ 4%
Progressive Motility	≥ 32% with forward progression

SEMINAL FLUID EXAMINATION - FERTILITY

Collected on 12.05.16 Time of Collection 10:20
Examined on 12.05.16 Time of Examination 11:40

		Normal Range
Appearance	Normal	
Liquefaction	Normal	
Viscosity	Normal	
Volume	2.5 mL	(2.0 - 6.0)
pH	8.1	(> 7.2 at 1 hr)
Sperm Count	27.2 million/mL	(> 15 million/mL)
Motility		
PR:Progressive	67 %	(> 32%)
NP:Non-Progressive	7 %	(PR+NP > 40%)
IM:Immotile	26 %	
Morphology		
Normal	6 %	(> 4%)
Abnormal	94 %	

Validated by CL, MLSci A

SEMINAL FLUID EXAMINATION - FERTILITY

Collected on 10.08.16 Time of Collection 8:55
Examined on 10.08.16 Time of Examination 10:20

				Normal Range
Appearance	Normal			
Liquefaction	Normal			
Viscosity	Normal			
Volume	1.0	mL	*	(2.0 - 6.0)
pH	8.1			(> 7.2 at 1 hr)
Sperm Count	0.6	million/mL	***	(> 15 million/m
Motility				
PR:Progressive	26	%		(> 32%)
NP:Non-Progressive	9	%		(PR+NP > 40%)
IM:Immotile	65	%		
Morphology				
Normal	pending	%		(> 4%)
Abnormal	pending	%		

lidated by CL, MLSci

TERIM REPORT

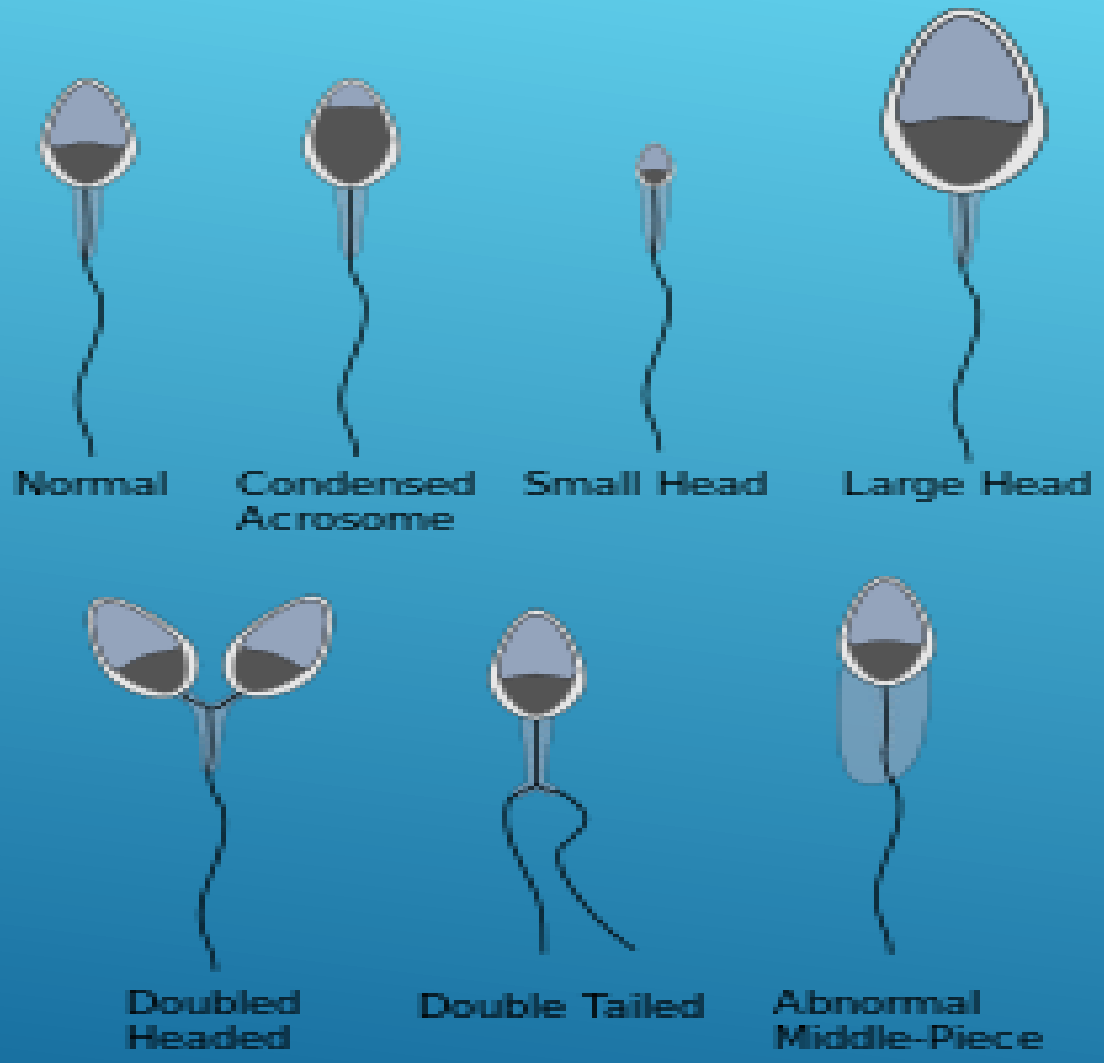
SEMINAL FLUID EXAMINATION - FERTILITY

Collected on 10.08.16 Time of Collection 8:55
Examined on 10.08.16 Time of Examination 10:20

				Normal Range
Appearance	Normal			
Liquefaction	Normal			
Viscosity	Normal			
Volume	1.0	mL	*	(2.0 - 6.0)
pH	8.1			(> 7.2 at 1 hr)
Sperm Count	0.6	million/mL	***	(> 15 million/m
Motility				
PR:Progressive	26	%		(> 32%)
NP:Non-Progressive	9	%		(PR+NP > 40%)
IM:Immotile	65	%		
Morphology				
Normal	pending	%		(> 4%)
Abnormal	pending	%		

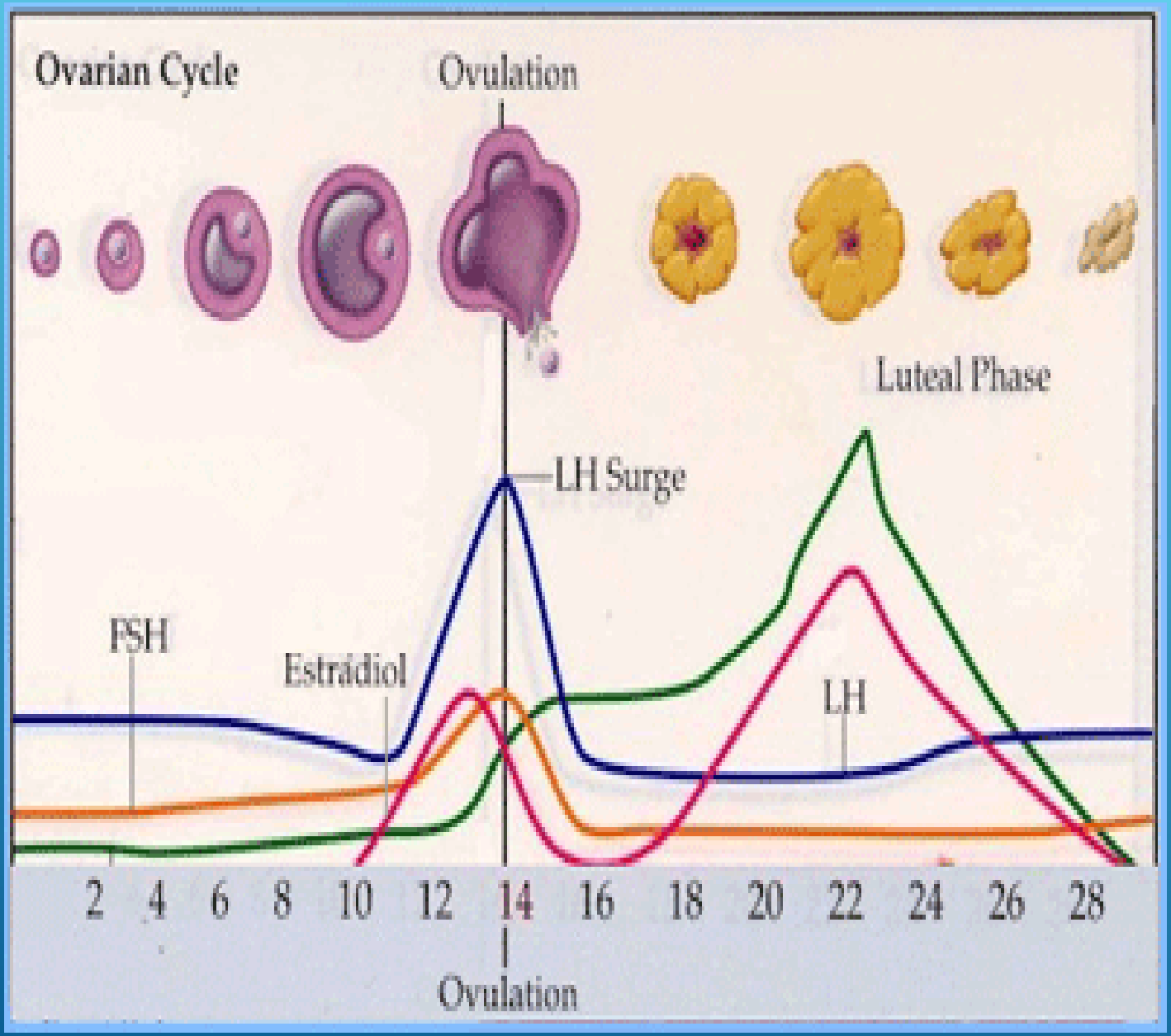
lidated by CL, MLSci

TERIM REPORT


Normal
Condensed Acrosome
Small Head
Large Head
Doubled Headed
Double Tailed
Abnormal Middle-Piece

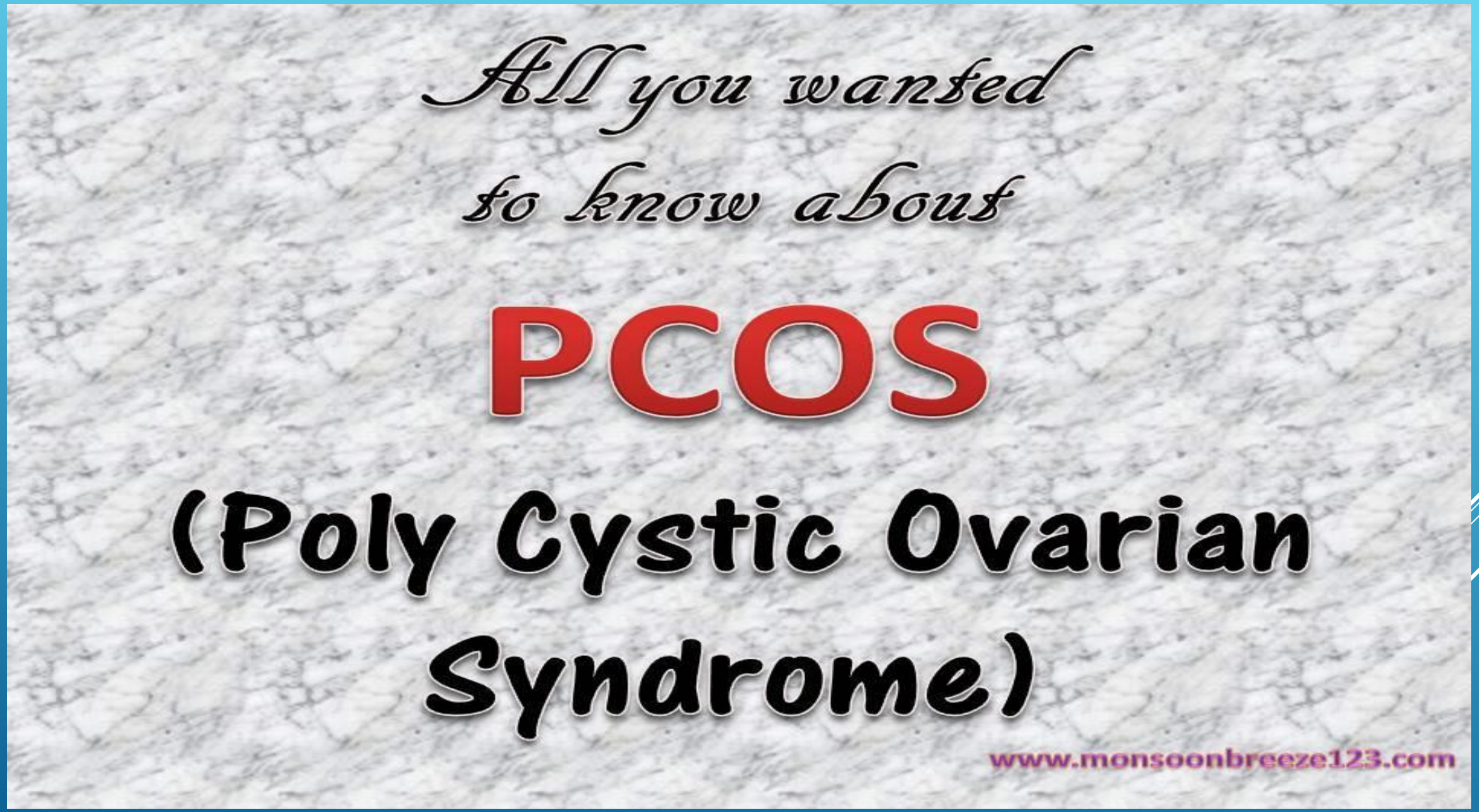
FEMALE

- ? REGULAR PERIODS
- ?PAINFUL
- ?HEAVY



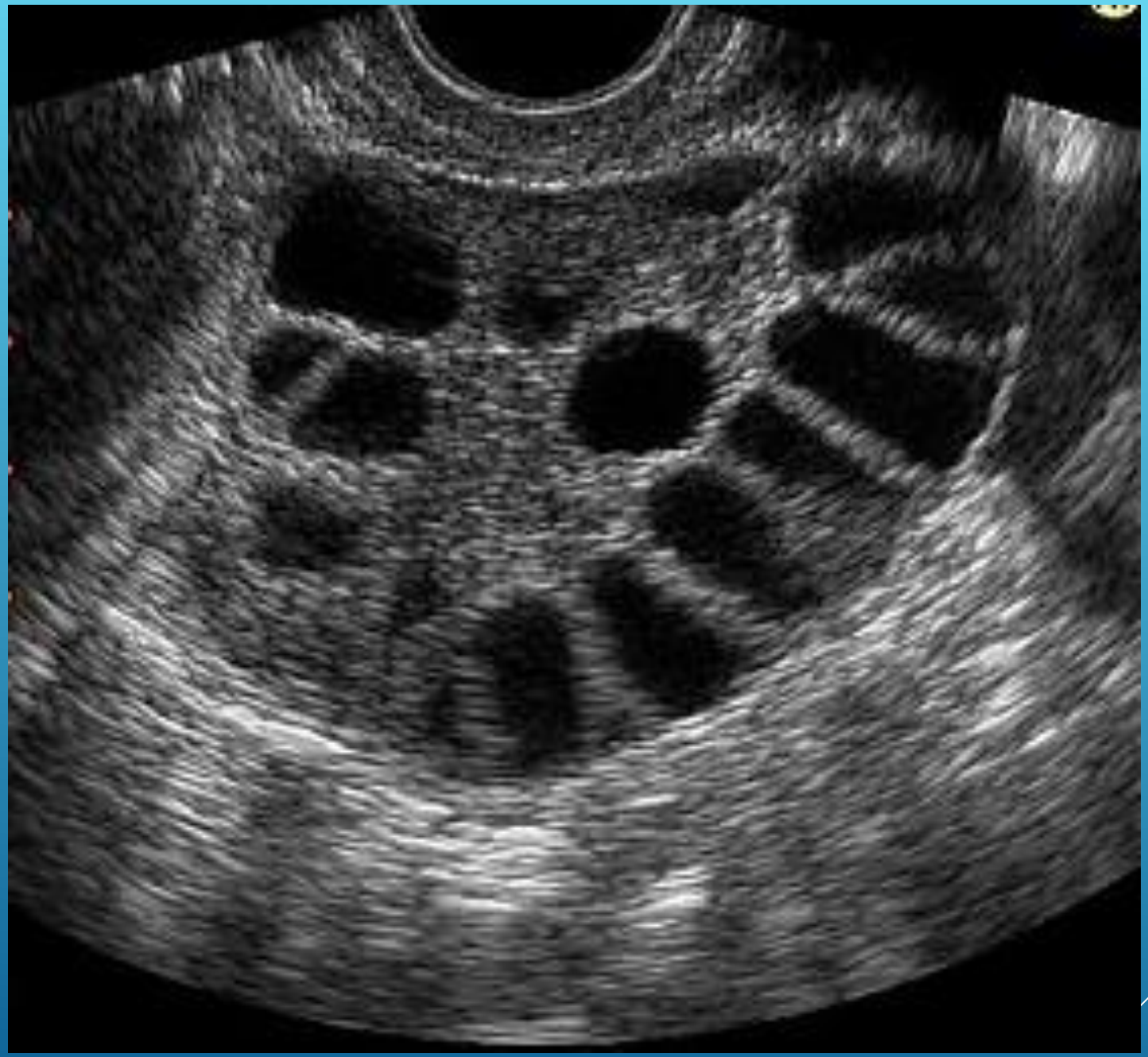
FEMALE HORMONES

- DAY 3
- DAY 21


All you wanted
to know about
PCOS
(Poly Cystic Ovarian
Syndrome)
www.monsoonbreeze123.com

- 2 out of the 3
  - Irregular periods
  - Clinical or biochemical androgen excess
  - Ultrasound PCO

  - Raised LH:FSH ratio ????? Often usefull



FEMALE INVESTIGATIONS

Day 3 FSH LH Oestrogen

Day 21 Progesterone

Free androgen index

Thyroid: TSH Free, T4

Prolactin

1st Antenatal screen, rubella, varicella

Cervical smear and swabs

- What else if useful?
  - Ultrasound
  - Saline scan
  - Antimullerian Hormone

(16-2472084-HMA-0)

REPRODUCTIVE HORMONES

LMP	Not Stated		N
FSH	2.1	IU/L	N
Progesterone	4	nmol/L	N
LH	0.8	IU/L	N
17b Oestradiol	202	pmol/L	N

Interpretation:	F.S.H.	L.H.	Progesterone	Oestradiol
Follicular	3 - 10	2 - 8	1 - 4	100 - 570
Mid-cycle	4 - 25	10 - 75		
Luteal	2 - 8	2 - 8	15 - 100	120 - 1100
Post Menopausal	> 20	> 15	< 4	< 180
Pregnancy	< 1	< 1		

Interpretation: PROGESTERONE

Luteal phase

<6 nmol/L - not indicative of ovulation

6 - 25 nmol/L - indicative of possible ovulation

>25 nmol/L - consistent with ovulation

(16-2554414-HMA-0)

REPRODUCTIVE HORM

LMP	Day 22 of cycle	
Progesterone	51	nmol/L
LH	11.1	IU/L
17b Oestradiol	420	pmol/L

Interpretation:	L.H.	Progesterone	Oestradiol
Follicular	2 - 8	1 - 4	100 - 570
Mid-cycle	10 - 75		
Luteal	2 - 8	15 - 100	120 - 1100
Post Menopausal	> 15	< 4	< 180
Pregnancy	< 1		

REFERRAL FRUSTRATIONS

Public or private

Secondary or tertiary

Gynae or fertility

Sub-Fertility Referral Form

Male Partner: Name: NHI: DOB: / /

REFERRER DETAILS

Name:

Signature:

Date: / / Time:

(Practice Stamp)

Patients must meet ALL of the following criteria for publicly funded fertility referrals:

BMI 18-32: Yes ☐

Non smoker or ex smoker > 3/12 Yes ☐

Age < 40 years: Yes ☐

No. of children in current relationship < 2: Yes ☐

PLUS ONE OF THE FOLLOWING:

A) Tertiary care referral for IVF/ICSI due to any of the following : azoospermia or oligospermia (< 5% normal forms), bilateral salpingectomy, tubal obstruction, oophorectomy, premature ovarian failure **(refer after 1 year of sub-fertility if one of these factors)**. Tertiary care referrals should be faxed directly to **Fertility Associates (03) 355 8851.** ☐

B) Anovulation other than premature ovarian failure if sub-fertility:

>2 years and bloods indicative of anovulation in one cycle ☐

or: <2 years and bloods indicative of anovulation in two cycles: (can refer after 6/12 if >35 yrs) ☐

(can refer after 12/12 if <35 yrs) ☐

C) Patient without factors in A or B (as above) and >2 yrs sub-fertility ☐

RELEVANT MEDICAL HISTORY

Gravida Parity:

No. of TOP:

No. of miscarriage:

No. of ectopic:

Menstrual cycle length:

No. of days bleeding per cycle:

Regular cycle: ☐ Yes ☐ No

Tried to conceive since: / /

Delayed fertility in previous relationship: ☐ Yes* ☐ No

*If yes, length of time:

Has either partner conceived in previous relationships?

Details

History of gynae / sexual health / endometriosis / PID / STIs / other:

ANY OTHER PAST RELEVANT MEDICAL HISTORY:

TEST RESULTS REQUIRED FOR REFERRAL

TEST	RESULT ATTACHED
Semen analysis	☐
Day 3 FSH*	☐
Day 21 Progesterone assay*	☐
Cervical smear	☐
Chlamydia swab	☐
First antenatal bloods	☐

If ovulation disorder suspected, extra results required:

TEST	RESULT ATTACHED
Prolactin	☐
TFT	☐
SHBG / FAI / Testosterone (day 2-4)*	☐

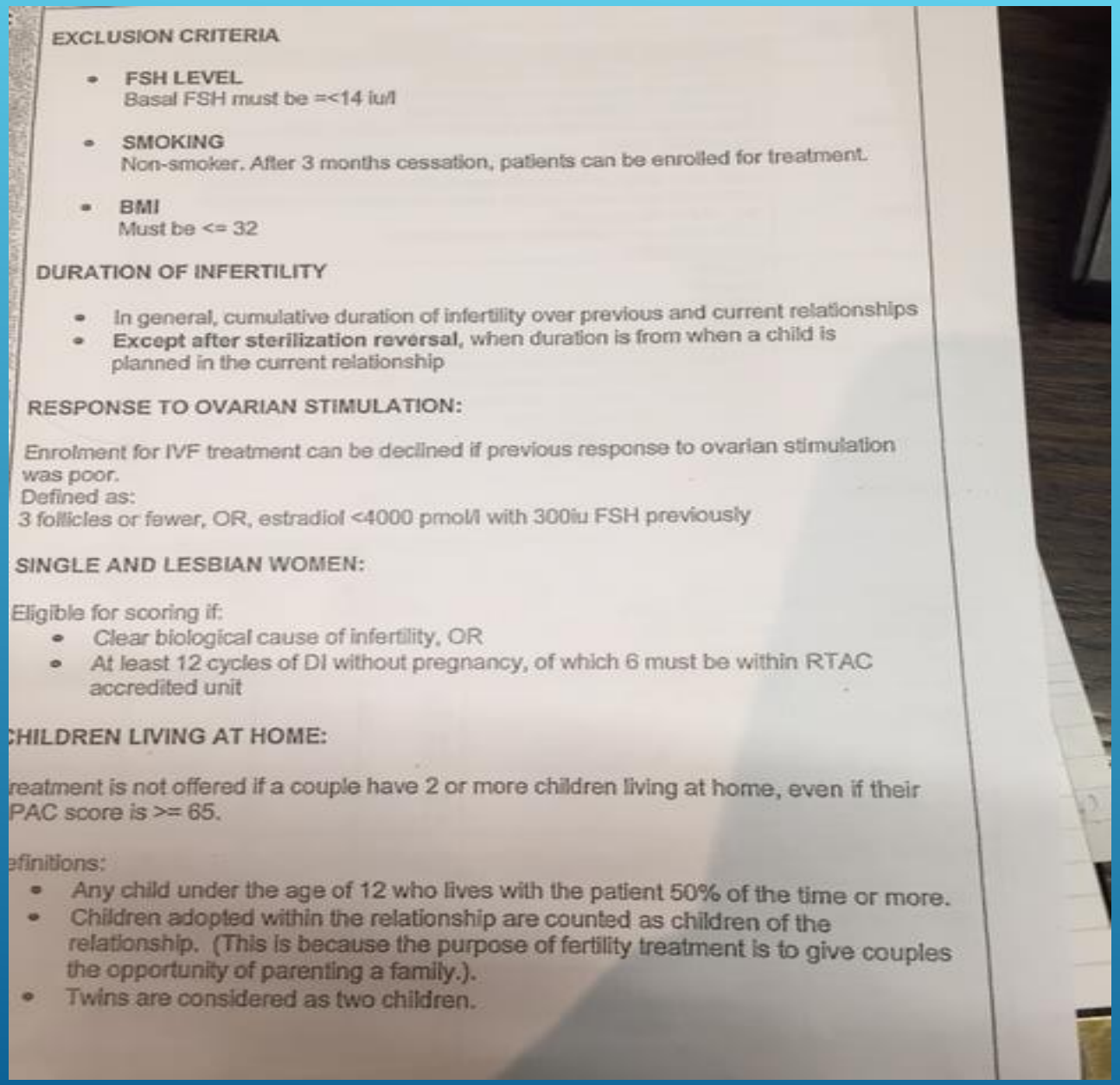
Timing of tests is important, please document day of cycle test done.
(NOTE: If oligomenorrhoeic or amenorrhoeic refer to Healthpathways for Progestogen challenge to time tests).

FURTHER INFORMATION TO SUPPORT REFERRAL

If patient fits criteria for **tertiary care referral (A):** fax to Fertility Associates – (03) 355 8851

If patient fits criteria for **secondary care referral (B and C):** fax to Women's Outpatients Dept – (03) 364 4423

TILITY REFERRAL FORM



EXCLUSION CRITERIA

- **FSH LEVEL**
  Basal FSH must be =<14 iu/l
- **SMOKING**
  Non-smoker. After 3 months cessation, patients can be enrolled for treatment.
- **BMI**
  Must be <= 32

DURATION OF INFERTILITY

- In general, cumulative duration of infertility over previous and current relationships
- **Except after sterilization reversal**, when duration is from when a child is planned in the current relationship

RESPONSE TO OVARIAN STIMULATION:

Enrolment for IVF treatment can be declined if previous response to ovarian stimulation was poor.
Defined as:
3 follicles or fewer, OR, estradiol <4000 pmol/l with 300iu FSH previously

SINGLE AND LESBIAN WOMEN:

Eligible for scoring if:

- Clear biological cause of infertility, OR
- At least 12 cycles of DI without pregnancy, of which 6 must be within RTAC accredited unit

CHILDREN LIVING AT HOME:

reatment is not offered if a couple have 2 or more children living at home, even if their PAC score is >= 65.

efinitions:

- Any child under the age of 12 who lives with the patient 50% of the time or more.
- Children adopted within the relationship are counted as children of the relationship. (This is because the purpose of fertility treatment is to give couples the opportunity of parenting a family.).
- Twins are considered as two children.

CPAC

funding

	Scored by:	
DIAGNOSTIC SCORE		
Anovulation 2° hypopituitary hypogonadism		6
Ovulatory with treatment, not pregnant after 9 months		
Clomiphene +/- Metformin +/- LOD resistant		3
Oligo-ovulation/luteal defects (fewer than 9 ovulatory cycles per year)		0
No ovulation defect		
Strict abnormal morphology; or ≤4%/Count <1M motile/ml; or severe Abs (MAR over 40%); or <1M motile sperm after semen prep; or IUI where <2M motile recovered; or X3 IUI without conception where male factor, but >2M motile recovered.		6
<50% motile or <20million/ml on two occasions		3
No sperm defect		0
Stage IV		6
Stage III		3
Stage II		2
Stage I		1
No endometriosis		0
Occlusion/severe adhesions/unsuccessful surgery after 12 months		6
Moderate adhesions/unsuccessful surgery after 6 months		3
Polyps/mild adhesions/normal tube on one side		2
Minimal adhesions on best side		1
No tubo-peritoneal pathology		0
Severe	Specify:	6
Moderate		3
Mild		2
Minimal		1
None		0
	Now	+1 year +2 ye

Minimal				0
None				
		Now	+1 year	+2 years
			Date:	Date:
>=5 years		6	6	6
>=4 and <5 years		3	3	3
>=3 and <4 years		2	2	2
<3 years		1	1	1
OBJECTIVE CRITERIA	Points	Now	+1 year	+2 years
Total Score > = 6	1.0			
3 – 5	0.7			
2	0.4			
0 – 1	0.2			
=<39 years	1.0			
40,41	0.5			
>=42	0.1			
OS = 01 X 02				
SOCIAL CRITERIA	Points	Now	+1 year	+2 years
Less than 1 year	5			
1 0r 2 years	20			
3 0r 4 years	40			
5 years or more	50			
None	30			
1 by relationship	10			
>1 by relationship	5			
By previous relationship	8			
Neither partner	20			
Yes, but death of child	20			
Yes	10			
SS = S1 + S2 + S3				
= OS X SS				

GOVT FUNDING FOR IVF/IUI

- A couple with unexplained infertility need to be trying 4 to 5 years before they are eligible for govt
- Once eligible and on the waiting list for IVF the wait can be 10 months