

DIAGNOSTIC RECOMMENDATIONS**History**

For all couples, the general practitioner asks about:

- ★ duration of desire for pregnancy;
- ★ number of months of unprotected intercourse;
- ★ duration and regularity of the cycle (possible indicator of oligomenorrhoea or amenorrhoea);
- ★ frequency of intercourse during the fertile period.

For couples who have had a desire to become pregnant for more than one year, the general practitioner will ask about:

- ★ previous pregnancies, outcomes, descendants (also from previous relationships);
- ★ prior use of a depot contraceptive;
- ★ prior STDs, salpingitis (infection of the fallopian tubes) or other lower abdominal infections, lower abdominal surgery;
- ★ pain symptoms in the lower abdomen (can point to endometriosis);
- ★ knowledge about the fertile period of the cycle;
- ★ relevant problems in home/work situation;
- ★ use of medicines (valproic acid), cytostatics, radiotherapy and exposure to harmful substances for the woman;
- ★ problems with intercourse (woman: vaginismus, endometriosis, sexual abuse; man: erection, ejaculation, actual intra-vaginal ejaculation);
- ★ in case of oligomenorrhoea or amenorrhoea: duration, possible causes (see NHG Clinical Practice Guideline on Amenorrhoea).

In case of *abnormal sperm analysis*:

- ★ current symptoms of the genitalia;
- ★ a febrile illness in the past twelve weeks;
- ★ smoking, use of alcohol or drugs;
- ★ STD infection;
- ★ use of medicines (ACE inhibitors, anti-depressants, sulphasalazine or anabolic steroids), cytostatics, radiotherapy, exposure to harmful substances;
- ★ cryptorchidism, trauma or surgery in the genital region.

Physical examination

For the *woman*:

- ★ inspection:
 - physique, growth of body hair, anatomical abnormalities of the external genitalia;
 - hirsutism (can indicate polycystic ovarian syndrome);
 - abdominal surgery scars;
 - significant excess weight or lack of weight.
- ★ speculum examination (anatomical abnormalities, vaginismus);
- ★ vaginal examination (anatomical abnormalities, endometriosis, myomas, vaginismus).

For the *man* (only in the case of abnormal sperm analysis):

- ★ inspection and palpation of external genitalia (note testis size, cryptorchidism, presence of vas deferens). A varicocele does not affect the further course of action.

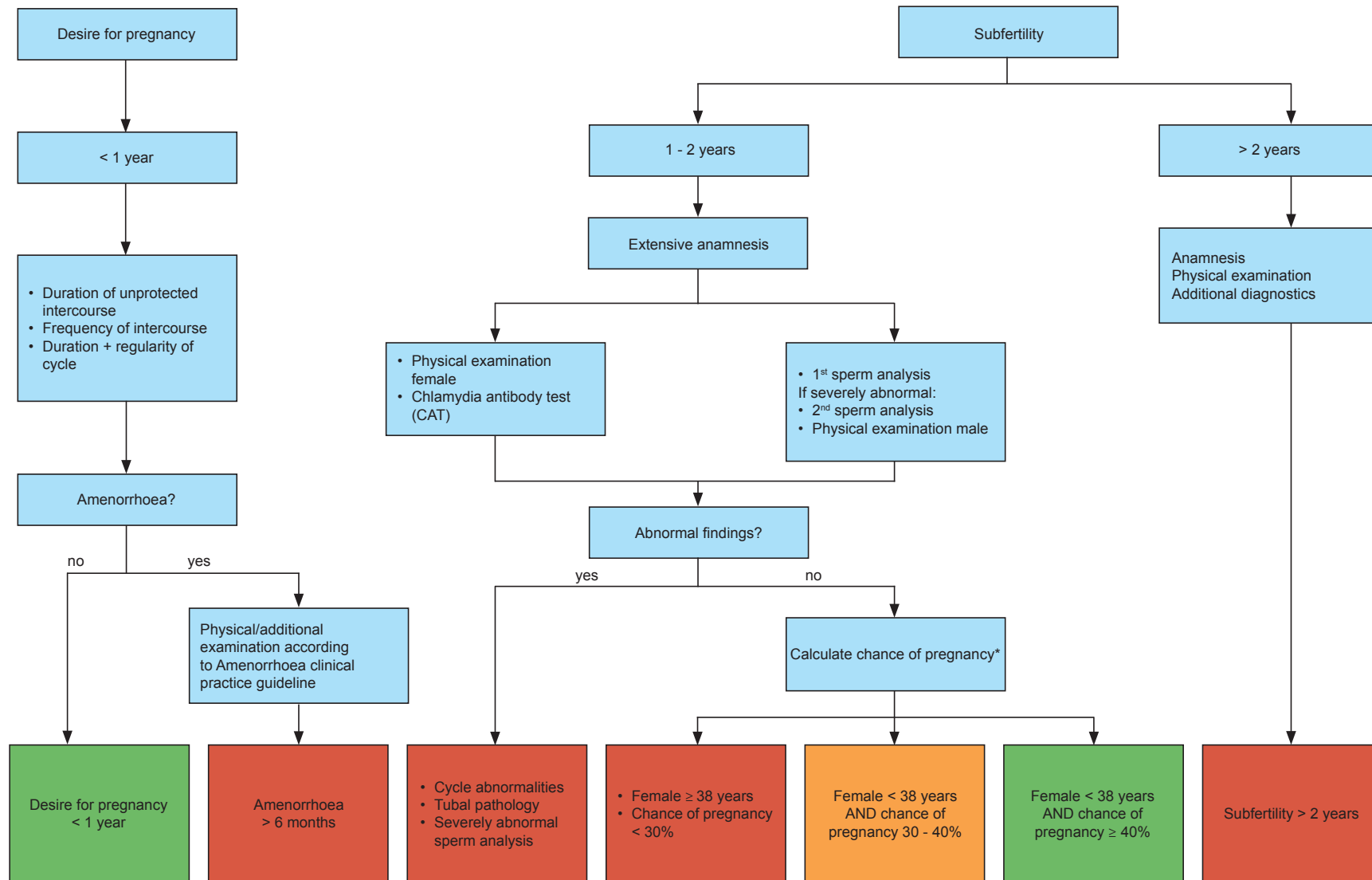
Additional investigations

- ★ Sperm analysis in the laboratory: abnormal in the case of azoospermia and a VCM (volume x concentration x percentage progressively moving spermatozoa) $< 3 \times 10^6$. If the result is abnormal, repeat after several weeks.
- ★ Chlamydia antibody test (CAT).

Evaluation

- ★ **Subfertility is present if pregnancy has not occurred after twelve months of intercourse aimed at achieving pregnancy.** The duration of the subfertility corresponds to the duration of the desire for pregnancy.
- ★ Refer to the gynaecologist in the case of subfertility and *abnormal findings*: ovulation abnormalities, indications for tubal pathology or a strongly reduced quality of sperm.
- ★ In the event of *normal findings*, determine the estimated chance of pregnancy in the next year (see table 1 and table 2).

Figure 1: Subfertility



■ • Expectative approach
 • Provide information about chance of pregnancy

■ Consult with couple about referral or expectative approach

■ • Referral
 • Guidance through gynaecological course

* use the prognostic model on: www.nhg.org

Tables: The chance of pregnancy in couples who have been subfertile for one year, according to age of the woman and percentage of progressively moving spermatozoa in the man, where the woman in question has not (table 1) or has (table 2) been pregnant before.

Table 1

Age (years)	Progressively moving spermatozoa (%)				
	20%	30%	40%	50%	60%
20	40	42	45	48	50
25	36	38	40	43	45
26	35	37	39	42	44
27	34	36	38	41	43
28	33	35	38	40	42
29	32	34	37	39	42
30	31	34	36	38	41
31	31	33	35	37	40
32	29	31	33	35	37
33	27	29	31	33	35
34	25	27	29	31	33
35	23	25	27	29	31
36	22	23	25	27	29
37	20	22	23	25	27

Table 2

Age (years)	Progressively moving spermatozoa (%)				
	20%	30%	40%	50%	60%
20	63	63	66	69	72
25	54	57	60	63	66
30	49	52	55	58	61
31	48	51	54	57	59
32	45	48	51	54	57
33	43	45	48	51	54
34	40	43	45	48	51
35	38	40	43	45	48
36	36	38	40	43	45
37	33	36	38	40	43

Instructions for use of the tables:

- The tables can only be used if the menstrual cycle is regular, the CAT is negative and the VCM > 3×10^6 .
- Consult the prognostic model on www.nhg.org if the percentage of progressively moving spermatozoa or the age of the woman falls outside of the table.
- The percentages in the table are indicative of the actual chance of pregnancy and should therefore be presented to the couple as an estimated chance.
- The choice of treatment policy (wait-and-see or referral and the accompanying choice of colours) has been determined based on agreements between first-line and second-line practitioners.
- Refer to the gynaecologist if the age of the woman ≥ 38 years.

Green: expectative approach for six to twelve months

Yellow: expectative approach or referral based on the woman's age and in consultation with the couple

Red: referral

TREATMENT RECOMMENDATIONS

Education

Desire for pregnancy < 12 months: significant chance of spontaneous pregnancy in the next couple of months (70% within 6 months; 80% within 1 year; 90% within 2 years).

In the case of *subfertility*, provide information about:

- ★ The most fertile period for the woman and the frequency of intercourse.
- ★ The role of lifestyle factors (smoking, alcohol, drugs) and body weight.

FOLLOW-UP AND REFERRAL

Refer to the gynaecologist in the case of:

- ★ *amenorrhoea* > 6 months;
- ★ subfertility for 1 year in the case of *abnormal findings*:
 - other indications for ovulation abnormalities (oligomenorrhoea);
 - indications in the anamnesis for possible tubal pathology or an abnormal CAT;
 - azoospermia or a strongly reduced sperm quality based on repeated sperm analysis (VCM < 3×10^6);
 - other problems (sexual problems, anatomical abnormalities).
- ★ subfertility for 1 year and in the case of *normal findings* if:
 - chance of pregnancy < 30%;
 - woman's age ≥ 38 years.
- ★ subfertility persisting for more than 2 years.