### After Stopping the 'Pill'



### WHAT IS THE 'PILL'?

\* In the text, 'Pill' refers to all hormonal contraception, whether taken orally, by injection, by patch or by pessary.

Hormonal contraception, (the Pill), consists of synthetic steroid sex hormones, (synthetic oestrogen or progesterone), which interfere with the normal functioning of the menstrual cycle. When a woman is on the Pill\* the apparent menstrual period is not a true\*\* menstruation, but consists only of a withdrawal bleed brought on by an abrupt drop in hormone levels during the Pill-free days. Effects of Contraceptive Medication on the Cervix and Cervical Mucus

(\*\*true menstruation is the bleeding that occurs at the end of a normal ovulatory cycle when pregnancy does not occur and during which the endometrium was primed first by oestrogen and then by progesterone.); ( Pessary = a device for inserting into the vagina as a support for the uterus or to deliver a drug such as a contraceptive).

#### Does fertility return immediately on stopping the 'Pill'?

In many women normal cycles return immediately. However for many others the return of fertility is delayed and it is impossible to predict when ovulation will return, it may vary from one month to eighteen months or more. After stopping the Pill, the woman can use the symptothermal method of NFP to help her to identify the return of her fertility. After charting for six cycles the woman can determine if her cycles have become normal.

It is worth reading the excellent study by Gnoth, Frank-Herrmann et al of 'cycle characteristics after discontinuation of oral contraceptives'.<sup>3</sup>

#### Characteristics of a normal cycle on the NFP Chart:

The following parameters should be documented on the NFP chart in order to label the cycle normal, in other words a normal cycle has the following characteristics:

- there is a thermal shift which confirms ovulation,
- the cycle is normal in length,
- the pre-ovulatory 'build-up' of fertile-type mucus is normal,
- the luteal phase is adequate after ovulation, i.e. is 10-16 days in length.

## What causes the delay in the return in fertility, and is it the same for everybody?

The delay in return of normal cycles may be due to the residual synthetic steroid hormones stored in the body which interfere with the normal functioning of the hypothalamic-pituitary-ovarian axis (HPO axis), and it may take three months or more for these hormones to be excreted. Even when all synthetic hormones are excreted it may take some time for the HPO axis to readjust to normal hormone levels. This occurs quicker in the woman who had already been pregnant, or whose cycles were regular prior to starting the Pill.

## The delay in return of fertility after stopping the Pill may be related to:

- The type of contraceptive medication used.
- The age of the woman, the age of starting the contraceptive.
- The duration of taking the contraceptive medication.
- The pattern of cycles before taking the contraceptive.
- Whether the woman had or had not a previous pregnancy.

# Fertility indicators, i.e. temperature, mucus, palpation of the cervix in the post-pill situation:

#### Temperature (BBT) post-Pill:

The 'thermal shift' is the only sign of ovulation in the post-pill situation.

#### Cervical mucus post-pill:

The cervical mucus indicator is less reliable after stopping the Pill because:

- (a) The cervical erosion, which is found in about 25% of women who have used the Pill for more than three months weeps copious amounts of fertile-type mucus once the woman stops ingesting progestins making the mucus symptom difficult to interpret.<sup>1</sup>
- (b) After stopping the Pill there may be cycle irregularities due to the effects of the residual synthetic steroid stored in the body on the hypothalamic-pituitary-ovarian axis (HPO axis). These cycle

irregularities may cause difficulty in the interpretation of the mucus symptom e.g. in anovular cycles there is no oestrogenic 'build-up to peak' mucus pattern. Even when ovulatory cycles occur, the cycles may be long due to delayed ovulation following a long follicular phase. Cycles may also be short due to a short luteal phase. The cycle irregularities caused by the Pill usually disappear by the sixth cycle after stopping the Pill. If the mucus symptom is unclear, a fertility monitor to predict ovulation may be helpful.

• (c) Contraceptive medication causes a depletion of the S-crypts in the cervix and causes premature aging of the cervix.

#### Palpation of the cervix post-pill:

Palpation of the cervix is less reliable in the post-pill situation.

#### Advice for women who wish to conceive after coming off the Pill:

Women are advised to defer pregnancy for three months after stopping the Pill, as it may take three months or more for all the synthetic steroid hormone to be excreted from the body. The woman who is charting her cycle after stopping hormonal contraception may note that it may take some months for her cycle pattern to return to normal as documented by Gnoth et al.<sup>3</sup> Women who are trying to conceive and are not pregnant after three or four cycles of timed intercourse in apparently normal cycles should consult their doctor, (see paragraph above for the 'characteristics of a normal cycle').

#### What if cycle irregularities persist after stopping the Pill:

Women with amenorrhoea (absence of periods), persistent irregular cycles, recurrent short luteal phases or very long cycles should consult their doctor if these cycle irregularities have a duration of four months or more.

**NOTE:** In a review article in the March 2009 issue of the medical journal, 'Fertility and Sterility',<sup>2</sup> Drs Barnhart and Schreiber state that " the overall birth rates seen in previous users of oral contraception (OC) are comparable to those seen in the general population after 12 months of attempting to conceive." Their review of the available literature indicates "that although OC users may experience a slight delay in the return to fertility compared to those who did not use contraception or those discontinuing nonhormonal contraceptive methods, fertility impairment is not sustained in the long term." In addition the authors state "that both DMPA injections and Norplant have a more pronounced effect on the return to fertility, (i.e. a greater delay in conception), than progestin-only oral contraceptives."

(DMPA is depot medroxyprogesterone; Norplant is levonorgestrel implant; progestin-only contraceptive is the 'mini-pill').

#### After stopping the Pill, special NFP rules apply

In the symptothermal double-check method of natural family planning, special

NFP rules apply after stopping the Pill. The woman must be taught these **rules** by a qualified NFP teacher.

To be most effective, the woman must be taught the symptothermal double-check method of natural family planning by a qualified NFP teacher.

- 1. Klaus, H; 'Natural family planning is it scientific? is it effective/ Newman Lecture Series,1; May 21, 2000; (online).
- Barnhart, Kurt, Schreiber, Courtney; 'Return to fertility following discontinuation of oral contraceptives'; Fertil & Steril' vol. 91; No. 3; March 2009. This is a review of the medical literature on this topic for the years 1960 to 2007.
- 3. Gnoth C, Frank-Herrmann P, Schmoll A et al; 'Cycle characteristics after discontinuation of oral contraceptives'; Gynecol Endocrinol; 2002; 16; 307-317. (This is an excellent study).