CHAPTER 6

The progestogen-only pill

'The mini-pill? That must be like my pill but a lower dose. So why am I on a higher dose?'

As its name suggests, this type of pill contains no oestrogen, and it is thus completely different from the combined pill. Its old name, the 'mini-pill', unfortunately implies that it is merely some kind of low-dose combined pill, but this is certainly not true. In this book, we shall instead refer to the progestogen-only pill as the POP. Far too little use is at present being made of the POP, because few women, or even their doctors, know anything about it. In actual fact is a very useful method of contraception, especially when there is some reason why a woman cannot, or does not, want to take oestrogen.

How does the POP work?

Unlike the combined pill (COC), the POP will not certainly stop ovulation (release of the egg). Evidence suggests that only about 20 per cent of women will cease ovulating altogether when taking this type of pill; another 40 per cent will experience some disruption of ovulation, but the remaining 40 per cent will continue to ovulate normally. If it is not reliably stopping ovulation, how does it work? In the first place it affects cervical mucus, thickening it so that it becomes more difficult for the sperm to get through. At mid-cycle, when you are most fertile, the mucus has very large gaps between the microscopic strands, so that the sperm have plenty of room to swim through. However, four hours after you have swallowed a POP, the strands are pushed closer together to form a dense mesh. Unfortunately, this effect only lasts a short time: in some women it begins to wear off after about 27 hours. This means that with the POP it is important to remember to take the pill within three hours of the same time each day.

The POP also works by altering the lining of the
number and size of its blood vessels; if it is very
implantation (the embedding of a fertilized egg) w
Thus even if a woman has ovulated, and a sperm
trating the cervical mucus, with any luck this effect
to stop the pregnancy from taking place.

How effective is the POP?

The POP does not have such a high success rate as
it does not always stop ovulation, but it does not c
rate ranges from 0.5 to 4 per hundred woman-year
took the POP for a year, at most four would be like
Like any method of contraception which allows yo
rate improves as you grow older, since you will ov
the 'top up' needed will become less. Figure 6.1 show
related to age, so that you will be able to decide fo
it now, or wait till you are older.

It is clear that the failure rate above the age of 3
under two per 100 woman-years. However, as regard
the age of 25, the failure rate is around four, and the
failure rate in teenagers may perhaps be too high fo

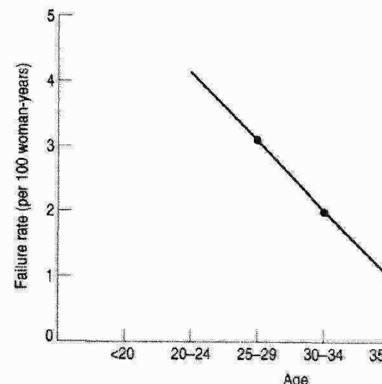

Figure 6.1 Graph showing failure rates for the proges
user (*Source*: Vessey et al., *British Journal of Family Plan*

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Table 6.1 Composition of progestogen-only pills

Femulen	Ethynodiol diacetate	500 mcg.
Micronor/Noriday	Norethisterone	350 mcg.
Microval/Norgeston	Levonorgestrel	30 mcg.
Neogest	Norgestrel	75 mcg.

It is therefore better not to turn to the POP unless you are at least over the age of 25, and preferably over the age of 30. By the age of 35 the failure rate has become comparable to that of the COC (one per 100 woman-years), so the POP is recommended for those women who smoke and are therefore compelled to stop taking the COC at this age (see below).

What types of progestogen-only pills are available?

From Table 6.1, which shows the composition of the most common POPs in use, it can be seen that the dose of progestogen used in each of these brands is lower than that used in the combined pill.

Advantages of the POP

The principal advantage of the POP is that it contains no oestrogen, so those women who have been advised not to take the combined pill because of their family medical history, their own medical history, or because they have experienced side-effects on it can almost certainly take the POP. The POP does not affect blood pressure or increase the risk of heart disease, and since it does not affect blood-clotting or the blood levels of HDL cholesterol (see Chapter 5), it is even possible for a woman who has had a thrombosis (blood clot) to take it. For this reason there is no need to set an age limit for taking this pill, even for smokers, who are compelled to stop taking the combined pill at the age of 35; with this pill they can continue until the menopause. You can also safely take the POP even if you have to take tablets to lower your blood pressure.

The POP can be used by diabetics because it does not increase the likelihood of heart attacks, a risk which diabetics already face. Nor does it matter if you are very overweight; the POP will not make you put on any more, or increase the risk to your health. However, studies of newer low-dose progestogen-only methods suggest that, if you weigh more than 70 kg. (11 stone), the failure rate of the method may be increased (see Chapter 15), possibly even doubled. There have been relatively few studies specifically looking at this effect with the POP, but one did suggest a possible reduction in efficacy. Until further studies have been made, if it is crucially important

to you not to get pregnant—and especially if you are u
it might be worth discussing with your doctor whether
take two tablets a day instead of one.

As for the side-effects and health risks, those of the c
generally occur on the POP. Therefore, if you have expe
pressure on the combined pill, or if you suffer from he
(including migraine with focal aura, see Chapter 4), or if
on the combined pill, you can take the POP (even th
or migraines may persist, you will not be placed at gre
as might be the case with the combined pill). If you cha
because you have put on weight, felt bloated, or had br
should find you improve. If you have developed chloa
on the face) you can still take the POP, since, thoug
may not entirely go away, at least it should not become
be worth experimenting with the POP, if you suffer f
loss of interest in sex, despite the fact that these are no
side-effects; the dose of progestogen is so small that yo
effect vanishes.

If you are breastfeeding, it is quite safe to use the PC
stops the production of milk, nor has any effect on th
progestogen in the pill is extremely small, and only a
actually passes into the milk; in fact it has been calcula
took the POP every day while breastfeeding for two yea
time, the baby would have absorbed the equivalent of jus
tion, breastfeeding in conjunction with taking the PO
protection against pregnancy to almost 100 per cent, sinc
gives a contraceptive effect. (This is of course an im
protection given by the POP alone.)

The POP will not continue to affect your fertility in an
stopped taking it; even the 20 per cent of women who
therefore have no periods, will find that these return rap
Nor is there any need to give up the POP a few montl
to get pregnant.

As regards health risks, of course the evidence is limit
women have taken the POP as the combined pill, and
been as extensively researched; but it has not been shown
either a good or a bad effect on any kind of cancer.

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Disadvantages of the POP

The pill-taking routine

> 'The doctor told me because I'm 35 and I smoke, I can't take the pill any more. So he gave me this other pill, the progestogen-only pill. He says it's safe but I've got to be really careful about taking it at the same time every day. I've tried everything. I tried taking it in the morning, but I get up late at weekends. I tried taking it at night, but that was hopeless. I tried taking it at lunchtime, but then I had to keep going to the loo if I was with colleagues or friends—well, it doesn't look nice, does it, taking a pill in front of people?'

A principal disadvantage is that, as we have already stated, it is necessary to take it at the same time (or at least within three hours of the same time) every day, or else its effect may wear off. This can clearly be a problem, but in the end most women manage to cope with it.

Breakfast time is convenient and easy to remember for many people, the only difficulty being that they may get up very much later at weekends. If you do so, you could perhaps keep a set of pills in the office and take one when you arrive; then your timing will be easier to match at weekends. Other solutions to timekeeping problems might be to keep a spare packet at work or in your handbag; or, if you have a digital watch, you could set the alarm as a reminder to take your pills. Time zone changes can also be a problem if you travel frequently. The important thing is to make sure you do not leave a gap of more than 24 hours, and since the dose is so low it is better to take two pills within a day than to risk taking a pill late. Keeping a packet of pills permanently in your suitcase, in case you should happen to forget to pack your current one, is also a useful piece of insurance.

Period problems

As we have seen, since about 40 per cent of the women who take the POP will continue to ovulate normally, there will be no change to their periods. A further 20 per cent will, however, stop having periods altogether. This should not cause any anxiety about pregnancy, since it is due to the fact that in these women ovulation has completely stopped, and thus pregnancy is virtually impossible (this group is enlarged of course by those who take the POP while fully breastfeeding). This means you would be as well protected as if you were taking the combined pill, without the possible health risks or side-effects. As for all POP takers, there will be no extra difficulty for you in becoming pregnant after stopping. On the first occasion that you miss a

period, you do not of course know the cause: you may h
or had a stomach upset, and in fact become pregnant. Th
to have a pregnancy test about a week after your missed
should be negative, and you have still not had a period,
couple of weeks later. By this stage, if the tests still prov
be fairly confident that you have stopped ovulating. After
you are very unlikely to become pregnant, so—unless you
pregnancy symptoms—you do not need to keep having

> 'Neurotic? I was a wreck! Every time my period di
> was that nagging worry. Had I forgotten any with

Some women find the lack of periods disconcerting, and
anxious about the cause, especially if they know that th
to be forgetful over taking their pill. If this is the case wi
consult your doctor, as it is sometimes possible to brin
simply by changing the brand of POP.

The worst period problem, which affects about 40 per c
take the POP, is that periods become in some way irregul
erable nuisance, and can range from infrequent periods to
weeks or to constant spotting. There is unfortunately no
who will be affected, or what form the irregularity will tak
case. However, in many cases the problem only occurs w
starts taking the POP, and after a couple of months it will
not give up immediately. Again, a change of brand can be
the situation; it does not matter what brand you are on, ju
one of the others may help.

These three types of period pattern may in fact all ha
woman at different times. When she first begins to take
have irregular periods for a few months, and then they m
larity for a year or several years. Later, for no apparent rea
have irregular periods, or indeed they may stop altogethe
of these patterns may continue to recur. The causes of
obscure, but it seems that irregular periods may occu
hormone-producing routine of the ovaries is slightly o
periods thus return if the routine is re-established and, of
ovulating altogether, she will no longer have periods. Irre
naturally, occur for other reasons, and can affect women
any type of hormonal contraception: common causes are st
tion brought about by travelling.

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Ovarian cysts

There appears to be a slightly greater chance that women who take the POP may develop non-cancerous (benign) ovarian cysts. There is no need to worry about these, since as a rule they are small and cause no symptoms; they would probably not even be noticeable, and usually disappear without the need of treatment. On rare occasions a larger one may develop, and this may cause some pain: stopping the POP will generally be enough to make the cyst disappear. However, if you have already had an ovarian cyst which needed treatment you would be better advised not to use the POP, as you may be already slightly more at risk of developing another one. You should consider using a method which actually lowers the risk of an ovarian cyst, like the combined pill or injectable progestogens.

Ectopic pregnancy

An ectopic pregnancy is a pregnancy which occurs outside the womb itself—in other words, in the wrong place. When this happens it is usually in one of the Fallopian tubes. The tube is *not made* to expand in the way the womb is, so when the pregnancy reaches a certain size, the stretching causes the tube to burst. This is dangerous and can even be life-threatening. The most common reason for an ectopic pregnancy is that the tubes have been infected in the past. Infection damages the tubes so that the eggs take longer to travel down them, rather like an obstacle course. This also means there is more time for sperm to travel further and reach the tube, where fertilization can then take place.

The POP is good at preventing pregnancies within the womb itself, but does allow ovulation to happen in many women. Thus, those who already have slightly damaged tubes will still have their 'normal' pregnancies prevented, but not their ectopic ones. This means that, although overall there are very few pregnancies of any kind on the POP, those that do occur are slightly more likely to be ectopic. Some doctors would not even prevent a woman from taking the POP if she had already suffered an ectopic pregnancy, although in such a case she would be known to be at higher risk of another one. However, since the matter of risk due to the POP cannot at present be proved either way, and since no woman who has had one ectopic pregnancy should take even the slightest chance of increasing her likelihood of a second, it seems wiser to avoid the POP in these circumstances. There are in fact methods of contraception which actually decrease the risk, such as the combined pill or injectable progestogens, so these would be a more sensible choice.

If you have not had an ectopic pregnancy, then t
about it if you are taking the POP. If indeed there
very, very small.

Other uncommon side-effects

Because the POP is such a low-dose pill, side-effec
occasionally women on the POP find they feel blo
not put on weight), or they may develop acne or s
It is not even entirely certain that the POP is respo
ments, since some women find that there is no cha
taking the pill; but if you do suffer this kind of side-
consult your doctor. For many years we have asked f
of the new, specific progestogens in order to try an
lems. The market has been considered too small a
maceutical company to justify the enormous invest
at long last, it does look as though a desogestrel POI
the next year or two.

How to take the POP

When you begin to take the POP for the first tim
packet on the first day of your period; in these circ
no further precautions but will be protected straigh
ously been using the combined pill you should beg
you have finished the COC packet. Do not take th
Once again, no additional contraceptive precaution
should be taken every single day of the month; u
there is no pill-free week between packets. This is
tage, since women taking the COC find it all too e
packet after the break. In addition, as we have said
taken at about the same time every day. You canno
three hours late taking this pill. If you should find
three hours late you should take it as soon as you re
and then continue to take the rest of your pills as
need to take extra precautions for the next seven day
or diaphragm. You will also need to take precautio
have missed a couple of pills: in this case you should
and continue with the rest of the packet as usual.
pill and fail to take any precautions when having s
doctor to give you the emergency contraception pil

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> 'When I started the POP, I was given a leaflet which said I should use extra precautions for 14 days. Than I was told it was only necessary for 48 hours, though the leaflet in the packet still said 14 days. Now you say seven days. What on earth is going on?'

Unfortunately, pill-taking rules keep changing, usually because research shows that a new rule is simpler or safer. At one time women were advised to use additional precautions for 14 days if they missed a pill, as well as when they first began to take it. Eventually it was discovered that, although the cervical mucus effect wears off within 36 hours, it builds up again equally rapidly. This is why a 48-hour rule was introduced. It has been shown that ovulation is most unlikely to occur before the seventh day of the cycle (day 1 is the first day of a period), and by this stage both the cervical mucus effect and the thinning of the lining of the womb will have occurred. So as long as you start on the first day of your period, you will not need to take any additional precautions.

Unfortunately, science and legal bureaucracy do not go well together. It takes a very long time for manufacturers to be able to change the instructions on their leaflets, as they have to go through a lengthy official procedure. Also, manufacturers do not want the slightest possibility of their advice being found to be wrong, even in a few cases, because then they can be sued. Thus, until recently, the manufacturers' leaflets were still advising 14 days' extra precautions, while the Family Planning Association (FPA) leaflets said 48 hours.

Having several sets of conflicting instructions around at the same time helps no one. In an effort to achieve consistency, the FPA and the manufacturers have been negotiating to see if they can find a common ground. In the end they decided that the best compromise was to make the basic rule for the combined pill and the POP the same (that is, seven days). At least all the leaflets will now say the same thing. It could also be argued (though without scientific proof) that for the 60 per cent of women who do not ovulate on the POP, seven days does allow more time for the ovary to be completely 'switched off', as in users of the combined pill. However, no increase in avoidable pregnancies was demonstrated when the 14-day rule was replaced by the 48-hour rule.

If you have a baby

If you wish to begin taking the POP as soon as you have had a baby, there is no reason why you should not. However, studies have shown that problems with irregular bleeding are less likely to occur if you wait for between four and six weeks after the birth. A compromise that the FPA adopts is to

advise starting on day 21 after the birth. Equally, it is c
POP during breastfeeding; it is also much more effectiv
our view that as long as a breastfeeding woman is r
she need only use extra precautions if she is more tha
taking her pill.

You are not at risk of becoming pregnant again until t
delivery; later if you breastfeed, because of the contra
breastfeeding itself. So either start the POP then, or
example, for a week. But you can start earlier if all thi
cated (see Chapter 12 on contraception while breastfeed

After a miscarriage or a termination of pregnancy

You can start the POP the next day, without the need fo

Antibiotics and the POP

Although the combined pill is affected by a number of
despite its low-dose, escapes most of these problems. T
based on the enterohepatic cycle, which was described
oestrogens and progestogens have been absorbed throu
pass to the liver, where they are partially broken down
other substances. Some of these by-products are then du
bowel, to await disposal. The bacteria which live in
however capable of reconverting the oestrogen product
and this is then reabsorbed into the blood and used. Th
fore raising the blood levels of oestrogen by their action
cling does not happen to progestogens, so the bacteria
blood levels of progestogen in the body.

Antibiotics are designed to destroy bacteria, and if yo
particularly the so-called 'broad spectrum' ones like
cyclines, you may find that the bacteria in the gut hav
peared, and with them has gone your extra source of o
women's blood levels of oestrogen may be only just h
help of the bacteria, there is a danger that their taking an
the oestrogen to a level at which they might become p
additional precautions are advised if you take such anti
on the combined pill. However, since the bacteria
progestogen, their presence or absence is immaterial v
POP. It is thus quite unnecessary to take additional contr
if you are given a course of antibiotics for conditions s
or a sore throat.

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