

Trekking and the Oral Contraceptive Pill

Introduction

Oral contraceptive pills are hormonal preparations taken for several reasons. The primary purpose of hormonal contraceptives is as the name suggests, to prevent pregnancy. They are however used for the treatment of other conditions such as endometriosis and to regulate menstruation caused by dysfunctional uterine bleeding.

There are two types of OCP; the first contains two hormones, estrogen and progesterone and is called the "combined oral contraceptive pill" or COCP. The second OCP is a progesterone only preparation or POP, sometimes called the "mini-pill". As its name suggests it contains only the hormone progesterone. Both OCP's will be discussed in the context of trekking but most of the concern and much of the data is relevant only to the COCP, the preparation that contains estrogen.

The main concerns about taking OCPs while trekking

It has been long recognized that women taking the COCP run a slightly higher risk of developing a blood clot inside a leg vein (called a deep vein thrombosis or DVT) than those women not taking the COCP. It has been calculated that about 5 in every 100,000 women using COCP's develop a blood clot as a result of taking these pills and this slight risk should be explained to every woman starting on the COCP. If a woman falls pregnant however, the risk of her developing a blood clot increase 12 fold to 60 per 100,000, so use of the COCP may be seen as being protective and preventing a greater risk of a blood clot as well as an unwanted pregnancy. There is no added risk of a DVT when taking the POP mini-pill.

The second issue is that there has been speculation that trekking at altitude is also a risk factor for developing a blood clot, particularly if the trekker becomes dehydrated. The evidence available however does not support this theory and there is little to suggest that going to moderate or high altitude for less than three weeks increases your chances of developing as blood clot, even if you become dehydrated.

At extreme altitudes (>5,500 meters) however there is a general impression among altitude physicians that an increased risk of blood clotting exists. This is an impression only and no data exists to prove or refute this impression. Mountaineers spending several months at extreme altitude, often in very cramped conditions, are the group most commonly thought to be at risk from developing blood clots.

Conclusion

The evidence that is available suggests that women using the COCP run no greater risk of developing a DVT at altitude than they do at sea level. Women who smoke however run a considerably higher risk of a DVT regardless of altitude and this risk is compounded by COCP use. There is plenty of anecdotal evidence that women using the COCP while trekking are not at greater risk and many thousands of women do so every year. At the CIWEC clinic and at other facilities where travelers to altitude are regularly treated it has been noted that COCP use does not

January 2009

seem to make women vulnerable to forming blood clots and the clotting problems that are noted are seen more in smokers, sedentary people and the elderly. We have no reason at present to recommend that women should discontinue using the COCP because they are going trekking.

Women mountaineers spending prolonged time at extreme altitude run a theoretically higher risk of developing a DVT and caution should be advised in such circumstances. We would recommend that in these circumstances female mountaineers should consider stopping the COCP or switching to the POP.

Summary of points regarding the OCP and altitude.

1. COCP use increases the chance of a vein clot (DVT) forming regardless of altitude.
2. There is no evidence to suggest that altitude alone increases an individual's chances of forming a DVT.
3. The use of the POP (mini-pill) does not increase your chances of forming a DVT.
4. Falling pregnant increases your chance of getting a DVT by about 12 times over the COCP.
5. Smoking increases your chance of getting a DVT considerably, the risk is compounded by COCP use or pregnancy. Smokers intending to use the COCP at altitude should consider stopping the COCP (or preferably stopping smoking!).
6. There is no reason to advise otherwise healthy women to stop using COCP's whilst trekking.
7. At extreme altitude for prolonged periods, although there is no evidence of increased risk of DVT we would advise caution. Consider stopping the COCP or switching to the POP or using an alternative method if contraceptive protection is required.

Use of the COCP to regulate menstruation while trekking.

Female trekkers often consider using the COCP to control menses. Given that menstruation is so predictable when using the COCP it becomes quickly apparent if a woman will begin menstruating whilst on a trek. For women using the COCP a choice available to them is to omit the pill free week and start a new cycle of pills beginning with the first pill of the second cycle the day after the last pill of the first cycle. This will postpone menstruation until the second cycle is stopped unless a third cycle is commenced without a pill free week. To do this once means that any woman will be period free for six weeks which will almost certainly allow her to avoid menstruation while trekking. Taking two cycles "back to back" does not increase the risk of developing a DVT any more than taking the COCP itself. There is no reason to instruct women **not** to do this if they so wish.

If you have any specific questions regarding trekking whilst taking the COCP, please do not hesitate to contact the clinic.

(Revised: January 2009)