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PROGESTOGEN-ONLY CONTRACEPTIVES

POP = Progestogen-only pill (POP)
 D/NE = Depot medroxyprogesterone acetate (DMPA)/norethisterone enantate (NET-EN)
 LNG/ETG = Levonorgestrel implants (Norplant and Jadelle) and etonogestrel implants (Implanon)

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY				
PREGNANCY	NA			Clarification: Use of POCs is not required. There is no known harm to the woman, the course of her pregnancy, or the fetus if POCs are accidentally used during pregnancy. However, the relationship between DMPA use during pregnancy and its effects on the fetus remains unclear.
AGE*				
a) Menarche to < 18 years	1	2	1	Evidence: Limited evidence shows decreased bone mineral density over time among adolescent DMPA users, but not among levonorgestrel implant users. No studies have examined whether DMPA use among adolescents affects peak bone mass levels. ¹⁻⁵
b) 18 to 45 years	1	1	1	Evidence: In general, current DMPA users had decreased bone mineral density compared with non-users; this decrease was usually within one standard deviation of normal values. ⁶ Results for current Norplant users were mixed. ⁶ One study of Implanon users showed no change in bone mineral density over two years. ⁷
c) > 45 years	1	2	1	Evidence: Older DMPA users had decreased bone mineral density compared with non-users. However, limited evidence found that women gained bone mass following discontinuation of DMPA prior to menopause. Further, among postmenopausal women, there was no difference in bone mineral density between former DMPA users and never users. ⁸⁻¹³

* See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
PARITY				
a) Nulliparous	1	1	1	
b) Parous	1	1	1	
BREASTFEEDING				
a) < 6 weeks postpartum	3	3	3	<p>Clarification: There is concern that the neonate may be at risk of exposure to steroid hormones during the first 6 weeks postpartum. However, in many settings pregnancy morbidity and mortality risks are high, and access to services is limited. In such settings, POCs may be one of the few types of methods widely available and accessible to breastfeeding women immediately postpartum.</p> <p>Evidence: Studies have shown that among breast-feeding women less than 6 weeks postpartum, progestogen-only contraceptives did not affect breast-feeding performance and infant health and growth. However, there are no data evaluating the effects of progestogen exposure via breast milk on brain and liver development.¹⁴⁻³⁸</p>
b) ≥ 6 weeks to < 6 months postpartum (primarily breastfeeding)	1	1	1	
c) ≥ 6 months postpartum	1	1	1	
POSTPARTUM* (in non-breastfeeding women)				
a) < 21 days	1	1	1	
b) ≥ 21 days	1	1	1	
POST-ABORTION				
a) First trimester	1	1	1	<p>Clarification: POCs may be started immediately post-abortion.</p> <p>Evidence: Limited evidence suggests that there are no adverse side effects when Norplant or NET-EN are initiated after a first trimester abortion.³⁹⁻⁴²</p>
b) Second trimester	1	1	1	
c) Immediate post-septic abortion	1	1	1	

See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
PAST ECTOPIC PREGNANCY*	2	1	1	
HISTORY OF PELVIC SURGERY	1	1	1	
SMOKING				
a) Age < 35 years	1	1	1	
b) Age ≥ 35 years				
i) <15 cigarettes/day	1	1	1	
ii) ≥15 cigarettes/day	1	1	1	
OBESITY ≥ 30 kg/m ² body mass index (BMI)	1	1	1	Evidence: Studies provide conflicting evidence regarding whether obese women are at increased risk of weight gain and bleeding problems with DMPA use relative to non-obese women with DMPA use. ⁴³⁻⁴⁵ Studies show that obese women do not experience decreased effectiveness when using Norplant soft capsules or Jadelle. ⁴⁶⁻⁴⁸
BLOOD PRESSURE MEASUREMENT UNAVAILABLE	NA	NA	NA	Clarification: It is desirable to have blood pressure measurements taken before initiation of POC use. However, in some settings blood pressure measurements are unavailable. In many of these settings, pregnancy morbidity and mortality risks are high, and POCs are one of the few types of methods widely available. In such settings, women should not be denied use of POCs simply because their blood pressure cannot be measured.
CARDIOVASCULAR DISEASE				
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes and hypertension)	2	3	2	Clarification: When multiple major risk factors exist, risk of cardiovascular disease may increase substantially. Some POCs may increase the risk of thrombosis, although this increase is substantially less than with COCs. The effects of DMPA and NET-EN may persist for some time after discontinuation.

* See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
HYPERTENSION*				
For all categories of hypertension, classifications are based on the assumption that no other risk factors for cardiovascular disease exist. When multiple risk factors do exist, risk of cardiovascular disease may increase substantially. A single reading of blood pressure level is not sufficient to classify a woman as hypertensive.				
a) History of hypertension where blood pressure CANNOT be evaluated (including hypertension in pregnancy)	2	2	2	Clarification: It is desirable to have blood pressure measurements taken before initiation of POC use. However, in some settings blood pressure measurements are unavailable. In many of these settings pregnancy morbidity and mortality risks are high, and POCs are one of the few types of methods widely available. In such settings, women should not be denied use of POCs simply because their blood pressure cannot be measured.
b) Adequately controlled hypertension where blood pressure CAN be evaluated	1	2	1	
c) Elevated blood pressure levels (properly taken measurements)				Evidence: Limited evidence suggests that among women with hypertension, those who used POPs or progestogen-only injectables had a small increased risk of cardiovascular events compared with women who did not use these methods. ⁴⁹
i) systolic 140-159 or diastolic 90-99	1	2	1	
ii) systolic \geq 160 or diastolic \geq 100	2	3	2	
d) Vascular disease	2	3	2	
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is measurable and normal)	1	1	1	

See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
DEEP VENOUS THROMBOSIS (DVT)/ PULMONARY EMBOLISM (PE)*				
a) History of DVT/PE	2	2	2	
b) Current DVT/PE	3	3	3	
c) Family history of DVT/PE (first-degree relatives)	1	1	1	
d) Major surgery				
i) with prolonged immobilization	2	2	2	
ii) without prolonged immobilization	1	1	1	
e) Minor surgery without immobilization	1	1	1	
KNOWN THROMBOGENIC MUTATIONS (e.g., Factor V Leiden; Prothrombin mutation; Protein S, Protein C, and Antithrombin deficiencies)	2	2	2	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening.
SUPERFICIAL VENOUS THROMBOSIS				
a) Varicose veins	1	1	1	
b) Superficial thrombophlebitis	1	1	1	
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE*	I C 2 3	3	I C 2 3	
STROKE* (history of cerebrovascular accident)	I C 2 3	3	I C 2 3	

* See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.						
CONDITION	CATEGORY I=Initiation, C=Continuation						CLARIFICATIONS/EVIDENCE
	POP	D/NE		LNG/ETG			
KNOWN HYPERLIPIDAEMIAS	2	2		2		Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening. Some types of hyperlipidaemias are risk factors for vascular disease.	
VALVULAR HEART DISEASE							
a) Uncomplicated	1	1		1			
b) Complicated (pulmonary hypertension, risk of atrial fibrillation, history of subacute bacterial endocarditis)	1	1		1			
NEUROLOGIC CONDITIONS							
HEADACHES*	I	C	I	C	I	C	
a) Non-migrainous (mild or severe)	1	1	1	1	1	1	Clarification: Classification depends on accurate diagnosis of those severe headaches that are migrainous and those that are not. Any new headaches or marked changes in headaches should be evaluated. Classification is for women without any other risk factors for stroke. Risk of stroke increases with age, hypertension, and smoking.
b) Migraine							
i) without aura							
Age < 35	1	2	2	2	2	2	
Age ≥ 35	1	2	2	2	2	2	
ii) with aura, at any age	2	3	2	3	2	3	
EPILEPSY	1	1		1		Clarification: If a woman is taking anticonvulsants, refer to the section on drug interactions. Certain anticonvulsants lower POC effectiveness.	

See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
DEPRESSIVE DISORDERS				
DEPRESSIVE DISORDERS	1	1	1	Clarification: The classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives. Evidence: POCs did not increase depressive symptoms in women with depression compared to baseline. ⁵⁰⁻⁵³
REPRODUCTIVE TRACT INFECTIONS AND DISORDERS				
VAGINAL BLEEDING PATTERNS*				
a) Irregular pattern <i>without</i> heavy bleeding	2	2	2	
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2	2	2	Clarification: Unusually heavy bleeding should raise the suspicion of a serious underlying condition.
UNEXPLAINED VAGINAL BLEEDING* (suspicious for serious underlying condition)				
Before evaluation	2	3	3	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation.
ENDOMETRIOSIS	1	1	1	
BENIGN OVARIAN TUMOURS (including cysts)	1	1	1	
SEVERE DYSMENORRHOEA	1	1	1	

* See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
TROPHOBLAST DISEASE				
a) Benign gestational trophoblastic disease	1	1	1	
b) Malignant gestational trophoblastic disease	1	1	1	
CERVICAL ECTROPION	1	1	1	
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)	1	2	2	Evidence: Among women with persistent HPV infection, long-term DMPA use (≥ 5 years) may increase the risk of carcinoma in situ and invasive carcinoma. ⁵⁴
CERVICAL CANCER (awaiting treatment)*	1	2	2	
BREAST DISEASE*				Clarification: Evaluation should be pursued as early as possible.
a) Undiagnosed mass	2	2	2	
b) Benign breast disease	1	1	1	
c) Family history of cancer	1	1	1	
d) Breast cancer				
(i) current	4	4	4	
(ii) past and no evidence of current disease for 5 years	3	3	3	
ENDOMETRIAL CANCER*	1	1	1	
OVARIAN CANCER*	1	1	1	
UTERINE FIBROIDS*				
a) Without distortion of the uterine cavity	1	1	1	
b) With distortion of the uterine cavity	1	1	1	

See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
PELVIC INFLAMMATORY DISEASE (PID)*				
a) Past PID (assuming no current risk factors for STIs)				
(i) with subsequent pregnancy	1	1	1	
(ii) without subsequent pregnancy	1	1	1	
b) PID - current	1	1	1	
STIs*				
a) Current purulent cervicitis or chlamydial infection or gonorrhoea	1	1	1	Evidence: Limited evidence suggests that there may be an increased risk of chlamydial cervicitis among DMPA users at high risk of STIs. For other STIs, there is either evidence of no association between DMPA use and STI acquisition or too limited evidence to draw any conclusions. There is no evidence for other POCs. ⁵⁵⁻⁶¹
b) Other STIs (excluding HIV and hepatitis)	1	1	1	
c) Vaginitis (including trichomonas vaginalis and bacterial vaginosis)	1	1	1	
d) Increased risk of STIs	1	1	1	
HIV/AIDS				
HIGH RISK OF HIV*	1	1	1	Evidence: Overall, evidence is inconsistent regarding whether there is any increased risk of HIV acquisition among POC users compared with non-users. ⁶²⁻⁷⁸
HIV-INFECTED	1	1	1	Evidence: Studies are conflicting regarding whether there is an increased risk of HIV and herpes simplex virus (HSV) shedding among HIV-infected women using DMPA. ⁷⁹⁻⁸¹

* See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
AIDS On ARV therapy	1 2	1 2	1 2	Clarification: If a woman is taking antiretroviral (ARV) therapy, refer to the section on drug interactions. Because there may be drug interactions between hormonal contraceptives and ARVs, AIDS with ARV therapy is classified as Category 2.
OTHER INFECTIONS				
SCHISTOSOMIASIS				
a) Uncomplicated	1	1	1	Evidence: Among women with uncomplicated schistosomiasis, limited evidence showed that DMPA use had no adverse effects on liver function. ⁸²
b) Fibrosis of liver (if severe, see cirrhosis)	1	1	1	
TUBERCULOSIS				
a) Non-pelvic	1	1	1	Clarification: If a woman is taking rifampicin, refer to the section on drug interactions. Rifampicin is likely to decrease POC effectiveness.
b) Known pelvic	1	1	1	
MALARIA	1	1	1	
ENDOCRINE CONDITIONS				
DIABETES*				
a) History of gestational disease	1	1	1	
b) Non-vascular disease				
(i) non-insulin dependent	2	2	2	
(ii) insulin dependent	2	2	2	

See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
DIABETES (Cont'd)				
c) Nephropathy/ retinopathy/ neuropathy	2	3	2	
d) Other vascular disease or diabetes of >20 years' duration	2	3	2	
THYROID DISORDERS				
a) Simple goitre	1	1	1	
b) Hyperthyroid	1	1	1	
c) Hypothyroid	1	1	1	
GASTROINTESTINAL CONDITIONS				
GALL-BLADDER DISEASE				
a) Symptomatic				
(i) treated by cholecystectomy	2	2	2	
(ii) medically treated	2	2	2	
(iii) current	2	2	2	
b) Asymptomatic	2	2	2	
HISTORY OF CHOLESTASIS*				
a) Pregnancy-related	1	1	1	
b) Past COC-related	2	2	2	
VIRAL HEPATITIS*				
a) Active	3	3	3	
b) Carrier	1	1	1	
CIRRHOSIS*				
a) Mild (compensated)	2	2	2	
b) Severe (decompensated)	3	3	3	

* See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
LIVER TUMOURS*				
a) Benign (adenoma)	3	3	3	
b) Malignant (hepatoma)	3	3	3	
ANAEMIAS				
THALASSAEMIA	1	1	1	
SICKLE CELL DISEASE	1	1	1	Evidence: Among women with sickle cell disease, POC use did not have adverse effects on haematological parameters and, in some studies, was beneficial with respect to clinical symptoms. ⁸³⁻⁹⁰
IRON-DEFICIENCY ANAEMIA*	1	1	1	
DRUG INTERACTIONS				
DRUGS WHICH AFFECT LIVER ENZYMES				
a) Rifampicin	3	2	3	Clarification: Although the interaction of rifampicin or certain anticonvulsants with POPs and LNG/ETG implants is not harmful to women, it is likely to reduce the effectiveness of POPs and LNG/ETG implants. Use of other contraceptives should be encouraged for women who are long-term users of any of these drugs. Whether increasing the hormone dose of POPs alleviates this concern remains unclear. Evidence: Use of certain anticonvulsants decreased the contraceptive effectiveness of POCs. ⁹¹⁻⁹³
b) Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)	3	2	3	
ANTIBIOTICS (excluding rifampicin)				
a) Griseofulvin	2	1	2	
b) Other antibiotics	1	1	1	

See also additional comments at end of table

PROGESTOGEN-ONLY CONTRACEPTIVES (POCs)	POCs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.			
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	D/NE	LNG/ETG	
ANTIRETROVIRAL THERAPY	2	2	2	Clarification: It is important to note that antiretroviral drugs (ARV) have the potential to either decrease or increase the bioavailability of steroid hormones in hormonal contraceptives. The limited data available (outlined in Annex 1) suggest that potential drug interactions between many ARVs (particularly some non-nucleoside reverse transcriptase inhibitors (NNRTIs) and protease inhibitors (PIs)) and hormonal contraceptives may alter safety and effectiveness of both the hormonal contraceptives and the ARVs. It is not known whether the contraceptive effectiveness of progestogen-only injectable contraceptives (such as depot medroxyprogesterone acetate and norethisterone enantate) would be compromised, as these methods provide higher blood hormone levels than other progestogen-only hormonal contraceptives, as well as than combined oral contraceptives. Studies are underway to evaluate potential interactions between depot medroxyprogesterone acetate and selected PI and NNRTI drugs. Thus, if a woman on ARV treatment decides to initiate or continue hormonal contraceptive use, the consistent use of condoms is recommended for preventing HIV transmission and may also compensate for any possible reduction in the effectiveness of the hormonal contraceptive.

* See also additional comments at end of table

Additional comments

AGE

Menarche to < 18 years: For women under 18 years of age, there are theoretical concerns regarding the hypo-estrogenic effects of DMPA use, including whether these women will achieve their appropriate peak bone mass.

> 45 years: For women greater than age 45, there are theoretical concerns regarding hypo-estrogenic effects of DMPA use, including whether these women will regain all lost bone mass after discontinuation of DMPA.

POSTPARTUM

< 21 days: POCs may be safely used by non-breastfeeding women immediately postpartum.

PAST ECTOPIC PREGNANCY

POPs have a higher absolute rate of ectopic pregnancy compared with other POCs, but still less than using no method.

HYPERTENSION

Vascular disease: There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. However, there is little concern about these effects with regard to POPs or LNG/ETG implants. The effects of DMPA and NET-EN may persist for some time after discontinuation.

DEEP VEIN THROMBOSIS (DVT)/ PULMONARY EMBOLISM (PE)

Some POCs may increase the risk of venous thrombosis, although this increase is substantially less than with COCs.

CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE

There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. However, there is little concern about these effects with regard to POPs or LNG/ETG implants. The effects of DMPA and NET-EN may persist for some time after discontinuation.

STROKE

There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. However, there is little concern about these effects with regard to POPs or LNG/ETG implants. The effects of DMPA and NET-EN may persist for some time after discontinuation.

HEADACHES

Aura is a specific focal neurologic symptom. For more information on this and other diagnostic criteria, see: Headache Classification Subcommittee of the International Headache Society. The International Classification of Headache Disorders, 2nd Edition. Cephalalgia. 2004; 24 (Suppl 1): 1- 150.

http://216.25.100.131/ihscommon/guidelines/pdfs/ihc_II_main_no_print.pdf

There is concern that severe headaches may increase with use of NET-EN, DMPA and implants. The effects of NET-EN and DMPA may persist for some time after discontinuation.

VAGINAL BLEEDING PATTERNS

Irregular menstrual bleeding patterns are common among healthy women. POC use frequently induces an irregular bleeding pattern. Implant use may induce irregular bleeding patterns, especially during the first 3-6 months, but these patterns may persist longer. ETG users are more likely than LNG users to develop amenorrhoea.

UNEXPLAINED VAGINAL BLEEDING

POCs may cause irregular bleeding patterns which may mask symptoms of underlying pathology. The effects of DMPA and NET-EN may persist for some time after discontinuation.

CERVICAL CANCER (awaiting treatment)

There is some theoretical concern that POC use may affect prognosis of the existing disease. While awaiting treatment, women may use POCs. In general, treatment of this condition renders a woman sterile.

BREAST DISEASE

Breast cancer: Breast cancer is a hormonally sensitive tumour, and the prognosis of women with current or recent breast cancer may worsen with POC use.

ENDOMETRIAL CANCER

While awaiting treatment, women may use POCs. In general, the treatment of this condition renders a woman sterile.

OVARIAN CANCER

While awaiting treatment, women may use POCs. In general, the treatment of this condition renders a woman sterile.

UTERINE FIBROIDS

POCs do not appear to cause growth of uterine fibroids.

PELVIC INFLAMMATORY DISEASE (PID)

Whether POCs, like COCs, reduce the risk of PID among women with STIs is unknown, but they do not protect against HIV or lower genital tract STI.

STIs

Whether POCs, like COCs, reduce the risk of PID among women with STIs is unknown, but they do not protect against HIV or lower genital tract STI.

HIGH RISK OF HIV

Whether POCs, like COCs, reduce the risk of PID among women with STIs is unknown, but they do not protect against HIV or lower genital tract STI.

DIABETES

Non-vascular disease: POCs may alter carbohydrate metabolism.

Nephropathy, retinopathy, neuropathy: There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. The effects of DMPA and NET-EN may persist for some time after discontinuation. Some POCs may increase the risk of thrombosis, although this increase is substantially less than with COCs.

Other vascular disease or diabetes of > 20 years' duration: There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. The effects of DMPA and NET-EN may persist for some time after discontinuation. Some POCs may increase the risk of thrombosis, although this increase is substantially less than with COCs.

HISTORY OF CHOLESTASIS

Theoretically, a history of COC-related cholestasis may predict subsequent cholestasis with POC use. However, this has not been documented.

VIRAL HEPATITIS

Active: POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. This concern is similar to, but less than, that with COCs.

CIRRHOSIS

POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. This concern is similar to, but less than, that with COCs.

LIVER TUMOURS

POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. In addition, POC use may enhance the growth of tumours. This concern is similar to, but less than, that with COCs.

IRON-DEFICIENCY ANAEMIA

Changes in the menstrual pattern associated with POC use have little effect on haemoglobin levels.

References for progestogen-only contraception

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