



# 폐경주변기 피임

## : 호르몬 치료와 어떻게 다른가?

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# Perimenopause

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## The Perimenopausal Transition

Average age of onset — 46

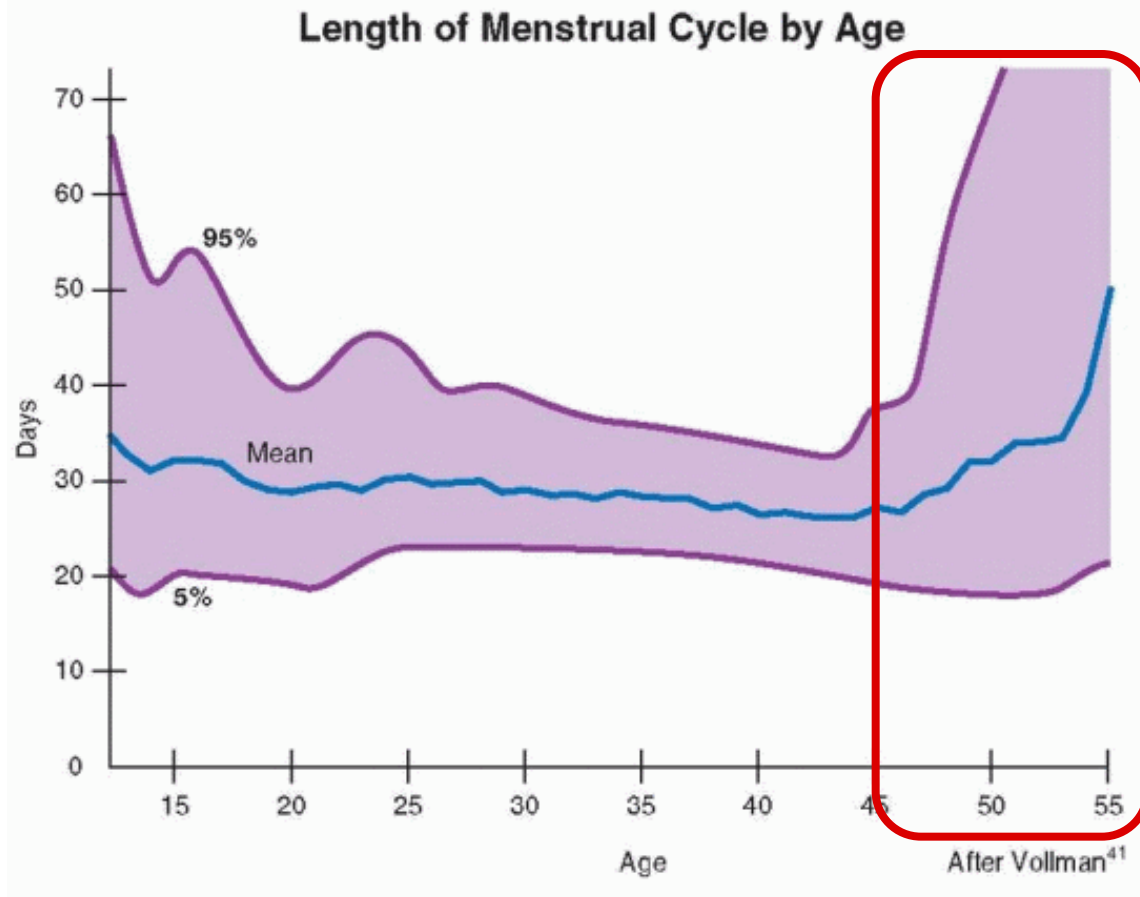
Age of onset for 95% of women — 39 to 51

Average duration — 5 years

Duration for 95% of women — 2 to 8 years

# Perimenopausal women,,,

- ✓ Increasing incidence of menstrual irregularity
- ✓ Longer duration ( *mean 40-60 days* )



# *Perimenopausal women,,,*

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Risk of an unplanned, unexpected pregnancy

✓ ~ FSH (>20 IU/L) & LH (>30 IU/L)

✓ Variability !

➔ recommend the use of contraception

until the postMP state is definitely established

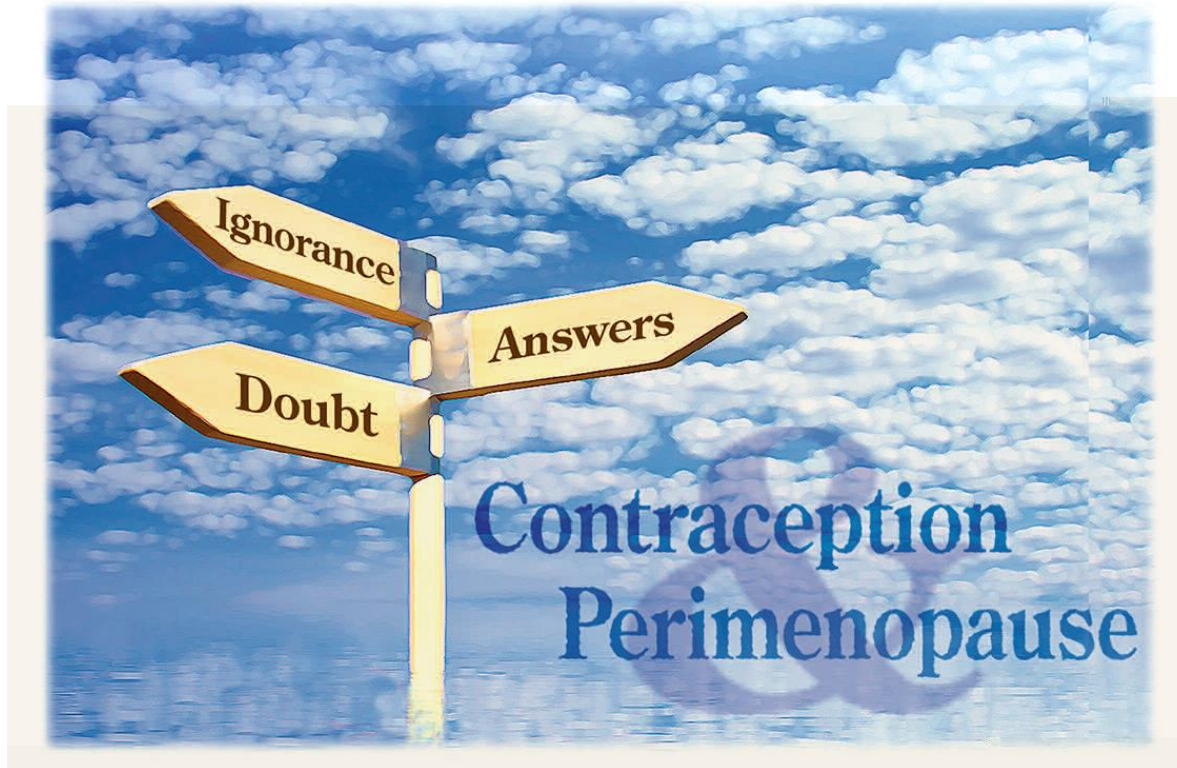
*The oldest spontaneous pregnancy in  
a 57 years + 3mo old woman*

# *Perimenopausal women*

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*Decline in fertility during perimenopause,  
but*

*Pregnancy is still possible until menopause*



# ***COCs***

# ***Vs***

# ***HT***

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<b>COCs</b>		<b>HT</b>
<p><b>Prevention of ovulation</b> Thickening of the cervical mucus Endometrial atrophy</p>		<p><b>Supplement Estrogen</b></p>
<ul style="list-style-type: none"><li>• Contraception</li></ul> <p>Control of Menstrual cycle Menorrhagia Dysmenorrhea Acne, Oily Skin, Hirsutism Premenstrual syndrome Medical tx. Endometriosis</p>	<p>Purpose</p>	<ul style="list-style-type: none"><li>• To relieve vasomotor symptoms</li><li>• Premature hypoestrogenism</li><li>• Genitourinary syndrome</li><li>• Prevention of Osteoporosis</li></ul>

# COCs

# Vs

# HT

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COCs		HT
4	Relative Potency	1
Ethinyl Estradiol	Estrogen	Conjugated equine estrogens (CEE) micronized 17b-estradiol, Ethinyl estradiol Estropipate (piperazine estrone sulfite) Estradiol valerate Esterified estrogens Transdermal estradiol

***COCs***

***Vs***

***HT***

COCs		HT
levonorgestrel, norgestimate, norethindrone, Desogestrel, gestodene drospirenone, dienogest, norgestrol acetate	Progestin	medroxyprogesterone acetate (MPA), norethindrone, norethindrone acetate, micronized progesterone drospirenone Dienogest



# COCs Vs HT

COCs	HT
<ul style="list-style-type: none"><li>• <i>Migraine headaches without aura</i></li><li>• <i>Controlled hypertension</i></li><li>• <i>Uterine leiomyoma</i></li><li>• <i>Gestational diabetes</i></li><li>• <i>Elective surgery</i></li><li>• <i>Seizure disorders</i></li><li>• <i>Obstructive jaundice in pregnancy</i></li><li>• <i>Sickle cell disease or sickle C disease</i></li><li>• <i>Gallbladder disease</i></li><li>• <i>Mitral valve prolapse</i></li><li>• <i>Systemic lupus erythematosus</i></li><li>• <i>Hyperlipidemia</i></li><li>• <i>Smoking (&gt;35 years, 15 ciga/day)</i></li><li>• <i>Hepatic disease</i></li></ul>	<ul style="list-style-type: none"><li>• <i>A history of breast cancer</i></li><li>• <i>A history of endometrial cancer</i></li><li>• <i>Porphyria</i></li><li>• <i>Severe active liver disease</i></li><li>• <i>Hypertriglyceridemia</i></li><li>• <i>Thromboembolic disorders</i></li><li>• <i>Undiagnosed vaginal bleeding</i></li></ul>

# Perimenopausal women,,,

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- ✓ Increasing incidence of *menstrual spotting, irregularity*
- ✓ Increasing *BMI, obesity*
- ✓ Increasing incidence of *VTE,*
- ✓ *Smoking is increasing* - the risk of TE  
(Absolute Clx. of OCs)
- ✓ *Vasomotor symptoms*

# Perimenopausal women

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- *Cardiovascular events*

*(VTE, myocardial infarction, stroke) are rare in COC users who are appropriate candidates for this method of contraception*

- *Long-term use does not appear to affect the risk of breast cancer, although most data reflect use in younger rather than perimenopausal women*

# *Perimenopausal women*

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- **Age** - an independent risk factor for **cardiovascular disease and VTE**
- Estrogen-containing methods should be used with caution in women with risk factors such as **smoking, obesity, diabetes, hypertension, or migraine headaches.**
- **Progestin-only** and **intrauterine contraceptives (IUCs)** are preferred for older women with these risk factors.

# *Noncontraceptive benefits of COCs for periMP women*

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- *Restoration of **regular menses***
- *Decreased dysmenorrhea*
- *Reduced heavy menstrual bleeding*
- *Reduced pain associated with ES*
- *Suppression of **vasomotor symptoms***
- *Enhanced **bone** mineral density and possible prevention of osteoporotic fractures*
- ***Decreased need for biopsies for benign breast disease***
- *Prevention of **endometrial and ovarian malignancies***
- *Improvements in **acne** that may flare up with periMP*

# Combination (E-P) contraceptives

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## Dose

*Ultralow dose E OC ?*

*25 mcg - Estrogen, Triphasic regimen*

*To decrease bothersome vasomotor symptom*

*unscheduled bleeding*

*obesity → need higher dose of E for contraception*

*Continuous regimen or shorter, no pill-free intervals*

*24/4 regimen*

*but, extended regimen – higher unscheduled bleeding*

# Combination (E-P) contraceptives - *nonoral*

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- monthly vaginal ring (NuvaRing)
- weekly patch (Xulane, Evra)

\*\* patch - 60% more E than COC (35mg of EE)

warning : risk of VTE may be higher

Age- independent risk factor for VTE,

∴ ring and COCs are more appropriate for perimenopausal women than the patch

# **Combination (E-P) contraceptives - *nonoral***

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- \*\* In contrast, menopausal HT,**  
the transdermal route (Climara patch,,,)
  - a lower risk of VTE compared with the oral route
  - transdermal E releases  
**relatively low doses of estradiol** rather than  
EE (synthetic, potent hepatic effects)



# *Emergency Contraception (ECs)*

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The most effective form of EC : **Cu-IUC**

(> 99% effectiveness, within 120 hrs of unprotected intercourse)

Oral ECs - ulipristal acetate, levonorgestrel

120 hours

72 hours after unprotected intercourse

# *Transition from hormonal contraception to HT*

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OC → Hormone therapy  
( ¼ lower hormone levels)

if the transition is *too soon*,

→ a periMP women to the *risk of unintended pregnancy*

“ result in *irregular bleeding*

“ unpleasant *vasomotor symptoms*

# ***Transition from hormonal contraception to HT***

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Decision on the transition time

- **FSH level** : hormone free time - **2 times** of FSH level
- until age of **statistically likely to be postMP**

non smoker – mean 51 years

: 50% of nonsmoking 51 year old women  
have not reached MP

***90% of women will have reached MP by age 55***

➔ women who are appropriate candidates may  
continue contraception until age 55

# *When to change : COCs → HT*

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## Measure the FSH level

- Starting at 50 years – annually
- **6 – 7 days of the pill-free week**  
(in a standard regimen)
- **FSH > 20 IU/L**

*ex ) Friday afternoon for Sunday starter*

*variability - 2 weeks of the pill-free ? Not practical  
not for the extended regimen*

Empirical decision : mid-50s

low dose contraception → HT

# ***Intrauterine contraceptives***

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- safe, highly effective, convenient, and long-term contraception
- 52-mg levonorgestrel-releasing intrauterine systems (LNG-IUS)
  - : 5 years (Mirena), 3 years (Liletta)
  - ~ 7 years ?**  
( especially in periMP women with decreased fertility, the 52-mg LNG-IUS may not need to be replaced every 5 years )
- women with ***heavy menstrual bleeding***
  - as effectively as endometrial ablation – avoid surgery
- prevention of ***endometrial hyperplasia*** in MP women using E therapy (off-label use)

# *Intrauterine contraceptives*

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- A **smaller, 13.5-mg LNG-IUS** : 3 years of use
  - : nulliparous or **periMP women**
  - : a **lower rate of amenorrhea** than 52-mg LNG-IUS
  
- **copper IUC** (Cu-IUC; ParaGard T 380A) : 10 years (~12 yrs)
  - Nova-T, Flexi-T 300 : 5 years
  - : can cause increased menstrual flow
    - not an optimal choice for women with HMB
  - : **should be removed in women who are MP**

# ***Progestin-only contraceptives***

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- Can use in most periMP women for whom **contraceptive doses of estrogen are contraindicated**
- Recommend – **older reproductive age who smoke, obese, migraines, diabetes, hypertension, or a history of VTE**
- **Irregular bleeding, spotting, or amenorrhea**
- Do not cause depressed mood or weight gain for most women
- etonogestrel implant (Nexplanon) - 3 years,  
suppresses ovulation
- Ctx. of P only contraceptives - a history of **breast cancer**

# ***Progestin-only contraceptives***

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- IM depot MPA (150mg; DMPA) - 3 months
  - : **menstrual migraine**, epileptic seizures may be reduced
- SQ Depo-subQ Provera (104mg of MPA) - 3months
  - : **initial irregular spotting is common**
    - > 4 injections ( > ½ users amenorrhea)
- black box warning : **reversible loss of bone mineral density**
- Continuously administered progestin-only pill  
0.35 mg norethindrone - effective contraception for  
periMP women
  - **spotting → strict schedule**



# Summary

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- PeriMP women **still need contraception** until she become menopause and the variation of perMP need caution.
- **Low dose COCs** offer effective, suitable contraception and **progestin only** contraception also can be good option
- Oral EP contraceptives can offer **additional effects especially in periMP** (vasomotor symptoms, irregular spotting, prevention of bone loss,,,) with dysmenorrhea, menorrhagia.
- Usually safe in periMP women, however age, obesity, hypertension, and diabetes should be considered as risk factor especially in this aged women.