

Why Women Should Know about Venous Thromboembolism

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Lifetime hormonal exposure

VTE: 1 in 10,000 women of fertile age

Increased risk with late menopause, estrogen exposure, multiple parity

Less recurrent VTE in women with hormone-provoked VTE

Menses → Child-bearing → Menopause

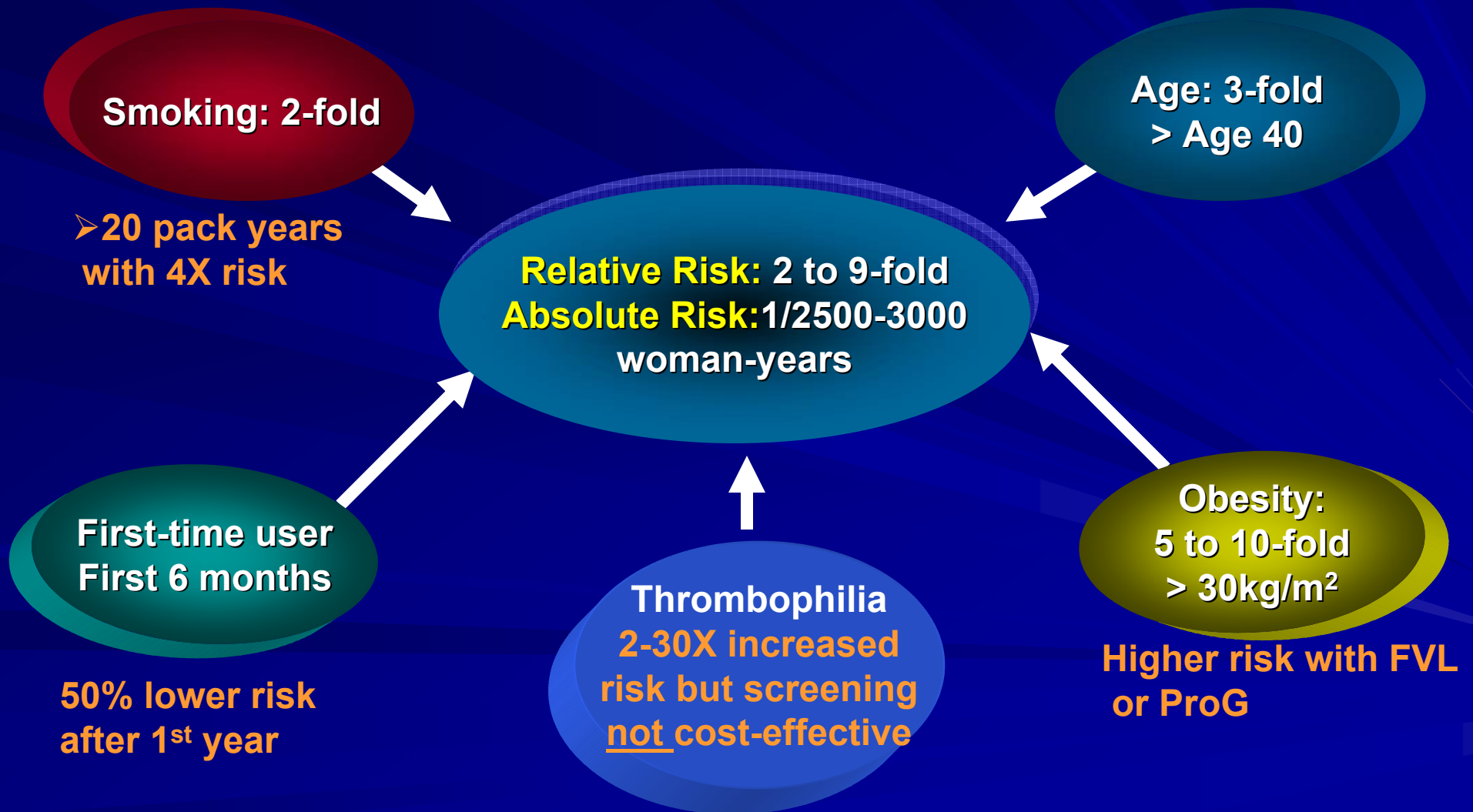
OCPs

Pregnancy

HRT

Lifetime estrogen exposure

Risk of VTE with OCPs



Contraceptive formulation

First

Mestranol
100 µg

Second

Ethinyl estradiol
30-50 µg
+
Levonorgestrel

Third

Ethinyl estradiol
+
Desogestrel
or
Norgestimate

Fourth

Ethinyl Estradiol
+
Drospirenone

New formulations:
Extended OCP
Morning after pill
Transdermal
Vaginal ring
Hormonal IUD

Progestin-only
Oral
Implant
Injectable

VTE Risk During Pregnancy

Thrombophilia
8-10X ↑ risk with
FVL or Pro G

Smoking 2.7 X
Previous VTE

Age
Immobilization
Preeclampsia
Obesity
Multiple pregnancy
Black > White

Relative risk: 5-fold
Absolute risk: 200/100,000 women
2/1000 live births
1 VTE death/100,000 births

Other risk factors:

Heart disease
Sickle cell
Lupus
Anemia
Hyperemesis
Infection
Transfusion
Fluid/electrolyte

80% DVT
20% PE

Antepartum
100/100,000

Postpartum
500/100,000
↑ risk C-section

Risk of VTE with HRT use

Relative Risk: 2 fold
Absolute Risk: 20 per 10,000
woman-years

High Risk:
Thrombophilia (FVL 25X risk)
History of VTE (5X risk)

Screening may be cost-effective

Lower Risk:
Low-dose estrogen
Estrogen-only (1.3X risk)
Transdermal estrogen (NS)
Progestin formulation
Short duration
Young post-menopause