

***Evaluation of the Combined Vaginal ring
(NuvaRing)
Clinical, Biochemical and Ultrasonographic
Studies***

A Thesis
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By
Dina Mohamed Refaat Dakhly
MB. Bch, M.sc
*Assistant lecturer of Obstetrics and Gynaecology
Faculty of medicine-Cairo University*

Supervised by:

Dr. Maher Mohamed Ahmed Abd El Wahab
*Professor of Obstetrics & Gynaecology
Faculty of Medicine -Cairo University*

Dr. Mohamed Mahmoud Waly
*Professor of Obstetrics & Gynaecology
Faculty of Medicine- Cairo University*

Dr. Fawzy Ahmed Halawa
*Professor of Biochemistry
Faculty of Medicine- Cairo University*

**Faculty of Medicine
Cairo University
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ﴾

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Abstract

NuvaRing, is a combined contraceptive vaginal ring that has been developed recently. it's comparable to combined oral contraceptive pills in action, but with lower hormonal levels. It acts manily by inhibition of ovulation as proved by hormonal profile and ultrasonographic assessment. Owing to the low hormonal level, it has minimal impact on the lipid and carbohydrate metabolism as well as hemostasis and liver function.

Key words

Contraceptive vaginal ring

Nuvaring

Ovarian Function

Hemostasis

Endometrial thickness

Index

Chapter 1

Introduction.....	1
Aim of Work.....	4

Chapter 2 Hormonal contraception

Introduction.....	6
Historical overview	8
Preparations of combined hormonal contraception.....	13
Patterns of use	17

Chapter 3 Review of the combined contraceptive vaginal ring

Introduction.....	25
Description.....	26
Pharmacokinetics.....	28
Mechanism of action.....	32
Indications.....	32
Use.....	35
Advantages.....	40
Disadvantages and Adverse events.....	41
Contraindications.....	54
Drug Interactions.....	55

Contraceptive efficacy.....	60
Cycle control.....	65
Compliance.....	75
Acceptability.....	76

Chapter 4 Patients and methods

Objectives.....	82
Subjects.....	82
Study design.....	84
Study assessment.....	91
Statistical analysis.....	93

Chapter 5 RESULTS.....96

Chapter 6 DISCUSSION.....113

Chapter 7 SUMMARY.....124

Chapter 8 REFERENCES.....129

Chapter 9 ARABIC SUMMARY.....148

List of tables

Table	Title	Page
Table.2.1	<i>Prevalence of oral use of combined hormonal contraceptives worldwide</i>	20
Table.3.1	<i>Mean (SD) serum etonogestrel and ethinyl estradiol concentration (n=16)</i>	29
Table. 3.2	<i>Mean (SD) pharmacokinetic parameters of NuvaRing® (n=16).</i>	30
Table.3.3	<i>Percentage of women experiencing unintended pregnancy during the first year of typical use and the first year of perfect use of contraception and the percentage continuing use at the end of the first year: United States.</i>	33
Table.3.4	<i>Percentage of women reporting adverse events with NuvaRing and a COC in two non-comparative studies and three randomized controlled trials</i>	51
Table.3.5	<i>Incidence of adverse events according to the study performed by Roumen et al., 2001</i>	53
Table 3.6	<i>Contraceptive efficacy with NuvaRing in 2 non-comparative studies and in 2 randomized controlled trials comparing NuvaRing with 2 different COCs: 150LNG/30EE and DRSP/30EE (ITT population)</i>	63
Table 3.7	<i>Incidences (percentages) of bleeding as a proportion of intention-to treat evaluable cycles^a according to Roumen et al., 2001</i>	67
Table 3.8	<i>The different pattern of bleeding in Oddsson et al., 2005a, b study between NuvaRing and COC</i>	70
Table 3.9	<i>The comparison between different patterns of bleeding in Ahrendt et al., 2006 study</i>	73
Table 3.10	<i>The incidence of intended bleeding pattern - defined as cycles with a withdrawal bleeding, no early or continued withdrawal bleeding, and no irregular bleeding - during NuvaRing and COC use in 1 large non-comparative study and 2 large randomized controlled trials</i>	74

Table 5.1	<i>The baseline demographic of the females</i>	96
Table 5.2	<i>Last used contraceptive method, Combinations of contraceptive methods could have been used.</i>	96
Table 5.3	<i>Results of the Questionnaire</i>	98
Table 5.4	<i>Patient satisfaction from NuvaRing use</i>	99
Table 5.5	<i>Incidence of adverse events</i>	100
Table 5.6	<i>FBS and PPBS changes with the NuvaRing</i>	102
Table 5.7	<i>Changes of lipid metabolism with NuvaRing use</i>	103
Table 5.8	<i>Liver enzymes values with Nuvaring use.</i>	103
Table 5.9	<i>Changes of antithrombin III and protein C with NuvaRing</i>	104
Table 5.10	<i>Hormonal levels with NuvaRing</i>	105
Table 5.11	<i>Maximum follicular diameter with NuvaRing</i>	107
Table 5.12	<i>Day 21 ultrasonographic assessment with NuvaRing use</i>	108

List of figures

Figure	Title	Page
Figure 3.1	<i>The combined contraceptive vaginal ring (NuvaRing®).</i>	27
Figure 3.2	<i>Evatane.</i>	27
Figure 3.3	<i>Mean serum concentration-time profile of etonogestrel and ethinyl estradiol during three weeks of NuvaRing® use.</i>	30
Figure 3.4	<i>NuvaRing insertion and removal</i>	39
Figure 3.5	<i>Incidence of irregular bleeding in the intent-to-treat (ITT) population according to Roumen et al., 2001</i>	66
Figure 4.1	<i>The questionnaire for recording of patient history, assessment of patient satisfaction, occurrence of side effects and recording of laboratory and ultrasonographic findings</i>	89
Figure 5.1	<i>The last used contraceptive method</i>	97
Figure 5.2	<i>Results of the Questionnaire</i>	98
Figure 5.3	<i>Patient satisfaction</i>	99
Figure 5.4	<i>Incidence of adverse events</i>	101
Figure 5.5	<i>Carbohydrate metabolism with NuvaRing use</i>	102

Figure 5.6	<i>Liver enzymes with NuvaRing use</i>	104
Figure 5.7	<i>FSH level changes with Contraceptive vaginal ring</i>	105
Figure 5.8	<i>LH level changes with Contraceptive vaginal ring</i>	106
Figure 5.9	<i>17β estradiol changes with Contraceptive vaginal ring</i>	106
Figure 5.10	<i>Progesterone changes with Contraceptive vaginal ring</i>	107
Figure 5.11	<i>Maximum follicular diameter with NuvaRing.</i>	108
Figure 5.12	<i>Day 21 endometrial thickness with NuvaRing use</i>	109
Figure 5.13	<i>Day 21 uterine blood flow with NuvaRing use</i>	109
Figure 5.14	<i>A case with normal uterine Doppler blood flow</i>	110
Figure 5.15	<i>A case with decreased endometrial thickness 4mm</i>	110
Figure 5.16	<i>A case day 8 of the cycle with endometrium (9 mm)</i>	111

Abbreviations

<i>Abbreviation</i>	<i>Details</i>
<i>2hPPBS</i>	2 Hours Post Prandial Blood Sugar
<i>17 β E₂</i>	17 Beta Estradiol
<i>ALT</i>	Alanine Transferase
<i>AST</i>	Aspartate Transaminase
<i>CCVR</i>	Combined Contraceptive Vaginal Ring
<i>CI</i>	Confidence Interval
<i>CL</i>	Apparent Clearance
<i>COCs</i>	Combined Oral Contraceptives
<i>DRSP</i>	Drospirenone
<i>EE</i>	Ethinyl Estradiol
<i>ENG</i>	Etonogestrel
<i>FBS</i>	Fasting Blood Sugar
<i>FSH</i>	Follicle-Stimulating Hormone
<i>GES</i>	Gestodene
<i>HDL</i>	High Density Lipoprotein
<i>IARC</i>	International Agency For Research On Cancer
<i>lb</i>	Pounds
<i>IMS</i>	Institute of Medical Statistics
<i>ITT</i>	Intent-To-Treat
<i>IUDs</i>	IntraUterine Devices
<i>IU/L</i>	International unit per litre
<i>IUS</i>	IntraUterine System
<i>Kg</i>	Kilogram
<i>LDL</i>	Low Density Lipoprotein
<i>LH</i>	Luteinizing Hormone
<i>LNG</i>	Levonorgestrel
<i>mg</i>	Milligram

<i>MHz</i>	Mega Hertz
<i>mm</i>	Millimeters
<i>Mm²</i>	Square meter
<i>ng/ml</i>	Nano gram per milliliter
<i>OCs</i>	Oral Contraceptives
<i>pg/ml</i>	Pico gram per milliliter
<i>PI</i>	Pearl Index
<i>PI</i>	Pulsatility Index
<i>PP</i>	Per Protocol
<i>RI</i>	Resistance Index
<i>SD</i>	Standard Deviation
<i>SHBG</i>	Sex Hormone-Binding Globulin
<i>t_{1/2}</i>	Half-Life
<i>Tmax</i>	Time at which maximum serum drug concentration occurs
<i>TV Doppler</i>	Transvaginal Doppler
<i>TVS</i>	Transvaginal Sonography
<i>Ug</i>	Microgram
<i>URTI</i>	Upper Respiratory Tract Infection
<i>U/S</i>	Ultrasonography