**EFFICACY OF 1 MG ESTRADIOL AND 2 MG DROSPIRENONE IN CLINICAL SYMPTOMS OF MENOPAUSE AND SEXUAL ACTIVITY AT POSTMENOPAUSAL WOMEN**

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**Objectives:** In our study we are proved the efficacy of 1 mg Estradiol and 2 mg Drosiprenone (Angeliq®) for menopausal symptoms and increases sexual act frequency.

**Methods:** Forty-two postmenopausal women were randomized into two treatment groups. 10, thirty-one women treated with 1 mg Estradiol + 5 mg Drosiprenone (E2/DRSP); 20, eleven women treated with 1 mg Estradiol + 5 mg Drogesterone (E2/DGS). The period of treatment was six months. The efficacy parameters were the individual relative change of that flushes, sweating episodes, sleep problems, nervousness, breast tenderness, sexual activity. Mean age of women was 50±2.5 years for E2/DRSP vs 53±2.05 years for E2/DGS. Time since menopause was 3.8±3.7 years for the first group and 5.2±3.0 years for the second. The weight mean was 65±1.1 kg vs 71±1.1±1.5 kg.

**Results:** The mean number of hot flushes per day, sweating episodes and sleep disturbances decreased by 100% under E2/DRSP vs 83% under E2/DGS. Breast tenderness decreased by 66% only in first group. The mean weight loss was at 8.9 kg under E2/DRSP vs 2.8 kg under E2/DGS. The positive effect (40%) in sexual activity was probably the result of a reduction of vaginal dryness in the both groups.

**Conclusions:** E2/DRSP (Angeliq®) was efficacious in the treatment of climacteric symptoms and improved the sexual activity. The good results were obtained in breast tenderness and loss body weight can be explained by drosiprenone, a progestine who has potent antimineralocorticoid activity.

**Keywords:** Menopause, estradiol, drosiprenone.

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**HORMONE THERAPY IN RECENT POSTMENOPAUSAL WOMEN: IMPACT OF THE ROUTE AND DOSE OF ADMINISTRATION ON CARDIOVASCULAR RISK FACTORS**

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**Objective:** To evaluate the effects of low-dose oral hormone therapy (HT) or non-oral HT on C-reactive protein (CRP) levels, fibrinogen, endothelin-1 and von Willebrand factor and on conventional risk factors in early postmenopausal early women. CRP levels were stratified as low (<1 mg/L), intermediate (1.0 to 3.0 mg/L) and high cardiovascular (CV) risk (>3.0 mg/L).

**Methods:** Cross-over, randomized clinical trial. Twenty patients received oral estradiol 1 mg and drosiprenone 2 mg for 2 months. Another group of 20 patients received 3 mg/day intranasal estradiol and then 200 mg/day vaginal micronized progesterone for 14 days/month for 2 months. At the end of this period, the patients were crossed over for another 2 months. Laboratory evaluations were performed before and during HT.

**Results:** Before treatment 8 (28%), 17 (42.5%) and 15 (37.5%) patients presented low, intermediate and high CV risk according to CRP. While the CV risk, estimated by CRP values, remain unchanged after low-dose oral HT (p=0.4), a significant reduction was found after non-oral HT, in comparison to low-dose oral HT (p=0.037). Total cholesterol and LDL-cholesterol decreased below basal levels in both treatment groups. Triglycerides and Von Willebrand factor decreased significantly only with non-oral treatment. Endothelin-1 and fibrinogen were unchanged with both treatments.

**Conclusion:** Neither treatment induced deleterious effects in the short term on variables related to cardiovascular risk in early postmenopausal women. Further studies of longer duration will be helpful to confirm our findings.

**Keywords:** Menopause; cardiovascular risk; hormone therapy; C-reactive protein.
survey. Menopause Rating Scale (MRS), at baseline and after testosterone pellet implant (dose 100-150 mg). Vaginal estrogen-progesterone use was allowed. No systemic estrogen therapy was used.

Results: Statistically significant improvement (Wilcoxon test for paired samples, p value <0.0001) was seen in all symptom categories:
- Hot flashes, sweating
- Heart discomfort (heart skipping, racing, tightness)
- Sleep problems (difficulty falling asleep, waking)
- Depressive mood, feeling sad, down, lack of drive, mood swings
- Irritability, feeling nervous, inner tension, feeling aggressive
- Anxiety, inner restlessness, feeling panicky
- Physical exhaustion, decrease in performance
- Mental exhaustion, impaired memory, decrease in concentration, forgetfulness
- Sexual problems, (change in desire, activity and satisfaction)
- Bladder problems (difficulty urinating, frequency, bladder incontinence)
- Dryness of vagina (burning, difficulty with intercourse)
- Joint and muscular discomfort (pain in joints, rheumatoid complaints)

Conclusions: Testosterone therapy alone, delivered by pellet implant, is effective in relieving symptoms and improving quality of life in premenopausal and menopausal patients. Testosterone’s protective affect on breast tissue is an additional benefit to be considered.

Keywords: Testosterone, implant, symptoms, pre-menopause, menopause, hormone therapy.

284 ANALYSIS OF HORMONE THERAPY PRESCRIPTION RATES BEFORE AND AFTER THE WHI STUDY USING CLAIMS DATA OF A GERMAN SICKNESS FUND

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Objectives: International figures suggest that the application of hormones has considerably decreased since the publication of the WHI study. The aim of our analysis was to clarify if and how prescription rates have changed in Germany.

Methods: In a longitudinal retrospective cohort study using Statutory Health Insurance claims data of 1.5 million beneficiaries, the prescription of hormones among menopausal women was investigated.

Results: 134,683 women (mean age 54 years) who were continuously enrolled from 2000 until 2005 could be identified. 38,897 (29%) received the observation period at least one prescription of a drug approved for hormone therapy (HT). The comparison of women who received prescriptions only before the publication of the WHI study (01/2000 till 07/2002) with women who received HT after WHI (02/2003 till 12/2005) shows a decrease in the number of women treated with hormones by a total of 18.9%. The analysis of incident HT resulted in a decrease in the number of women with prescriptions from n=480 to n=157 p.a., corresponding to 67.3%. Related to the study population (n=38,897) this equals a relative decrease of 0.9%.

Conclusions: Although the number of HT prescriptions has decreased in the observation period, after the WHI study in Germany a considerable number of hormone treatments is still undertaken or commenced.

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Keywords: Hormone replacement therapy, utilisation, drug prescription, claims data.

285 ADEQUATE TREATMENT DURATION TO ASSESS LONG-TERM EFFICACY OF NON-HORMONAL HOT FLASH THERAPIES

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Objective: To determine if there was evidence to support a minimum duration of placebo-controlled treatment in order to reasonably assess a non-hormonal compound’s long-term efficacy in the treatment of hot flashes.

Methods: An electronic database search of MEDLINE, Web of Science, and PsycINFO was performed to identify “target studies” showing a non-hormonal hot flash therapy to be effective at early time points only to become ineffective at later time points (i.e., showing short-term but not long-term efficacy).

Results: Three target studies were identified. The compounds Bellerget Retard, soy, and venlafaxine showed time points of 2, 6, and 7 weeks, respectively, when they last demonstrated efficacy before subsequently losing efficacy in a randomized controlled trial (RCT).

Conclusion: This analysis supports hot flash RCT treatment duration of at least 8 weeks in order to adequately assess a non-hormonal compound’s long-term efficacy. Because this effect was observed among 3 mechanistically unrelated compounds, the minimum 8 week time period is unlikely related to any particular class of therapy and more likely applicable to non-hormonal hot flash therapies, in general.

Keywords: Hot flash, clinical trial, methodology, non-hormonal.

286 THE REDUCTION OF BLOOD PRESSURE IN POSTMENOPAUSAL WOMEN USING HRT CONTAINING DROSPIRENONE AND DYDROGESTERONE

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Objectives: This study is to evaluate the effects of Angelique on blood pressure in postmenopausal Malaysian women within the period of 6 months in comparison with another continuous combined hormone replacement therapy (Femoston–Conti) Significant change in blood pressure was defined as a difference of ±5mmHg.

Methods: This randomized control trial involved 40 postmenopausal patients recruited and randomized to receive either HRT containing drospirenone (Angelique) or dydrogesterone (Femoston–Conti). After a rest of an hour, blood pressure, weight and height measurements were carried

Fig. 1. Daily hot flash frequency by treatment group for venlafaxine. Mean -2.0 treatment effects over first 7 weeks (p=0.05); Mean -1.2 treatment effects over last 5 weeks (p=0.46); Interaction between time and treatment effect (p=0.0051)"**.

**Personal communication, Eric Vittinghoff, PhD, University of California, San Francisco.

Daily hot flash frequency treatment effects during final treatment week for non-hormonal therapies studied for at least 8 weeks

| Study component Study treatment Treatment effect Treatment effect p-value |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|----------------------------------|
| Study treatment length | Placebo effect – drug effect |
| Gabapentin 300mg tid (n=59) | 12 weeks | -1.84 | <0.02 |
| Gabapentin 300mg tid (n=281) | 8 weeks | -2.10 | <0.0001 |
| Oxybutynin ER 15mg qd (n=148) | 12 weeks | -3.80 | <0.001 |
| Desvenlafaxine 100mg qd (n=222) | 12 weeks | -1.56 | <0.016 |


Conclusion: This analysis supports hot flash RCT treatment duration of at least 8 weeks in order to adequately assess a non-hormonal compound’s long-term efficacy. Because this effect was observed among 3 mechanistically unrelated compounds, the minimum 8 week time period is unlikely related to any particular class of therapy and more likely applicable to non-hormonal hot flash therapies, in general.

Keywords: Hot flash, clinical trial, methodology, non-hormonal.