

COMPLEMENTARY AND ALTERNATIVE THERAPY TO ESTROGEN REPLACEMENT

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Overview

- ***Part I – Prototypes of Menopausal Population***
 - Perimenopausal
 - Early Menopause
 - Late Menopause
- ***Part II – Statistics and Ethnicity***
- ***Part III – Alternative and Complimentary Therapies***
 - Biological: Herbs, Vitamins, Diet, Amino and Fatty Acid
 - Mind, Body and Behavior
 - Energy
 - Manipulative
 - Medical: Non-hormonal medicines
- ***Summary and Conclusions***

Perimenopausal Patient

- ***Primary clinical endpoint is symptomatic relief:***
 - Clinical Presentation:
 - Abnormal Bleeding
 - Vasomotor Instability
 - Urogenital Atrophy
- ***Symptomatic Perimenopause:***
 - Subjective Assessment
 - Comprehensive Evaluation in Perimenopause

Comprehensive Evaluation in Perimenopause

- *Medical psychological, family, and social history*
- *Complete physical examination, including breast, pelvic, rectovaginal, and thyroid*
- *Laboratory testing that includes Papanicolaou test, stool guaiac, mammogram, serum lipid profile, thyroid fasting blood sugar, and sexually transmitted diseases (if necessary)*
- *Identification of concomitant medications.*

The Early Postmenopausal

■ ***Definition***

- Amenorrhoea of 12 Months
Or
- Amenorrhoea of 6 months with FSH =
 - More than 40m IU/c.c.
- Major Concerns
 - Urinary incontinence
 - Sexual Dysfunction
 - Mood Changes

Early Postmenopause- (Cont.)

■ ***Screen for sexual dysfunction***

- Menstrual, obstetric and gynecologic histories
 - Drug-related side effects
 - Current and past relationships
 - Substance abuse and history
 - Psychosocial and age-related issues
 - Sexual satisfaction
 - Use validated questionnaire for further assessment
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Later Postmenopausal Patient

- ***Definition – Five or more years postmenopausal***
- ***Main concern –***
 - HRT use and Breast Cancer
 - HRT use and Dementia (Alzheimer's disease- AD)
 - HRT use and CHD
 - HRT, Lipid lowering drugs and atherosclerosis (WELL-HART Study)

Types of female sexual dysfunction & treatment options

- ***Sexual desire disorders***
 - Hypoactive sexual desire disorder
 - Sexual aversion disorder
 - ***Sexual arousal disorder***
 - ***Orgasmic disorder***
 - ***Sexual pain disorders***
 - Dyspareunia
 - Vaginismus
 - Noncoital pain disorder
 - ***Sex therapy or couples' therapy***
 - ***Hormone therapy***
 - Estrogen with or without progestin
 - Estrogen/androgen*
 - Androgen*
 - ***Lubricants/moisturizers***
 - ***Vaginal estrogen***
- *Not approved by the Food and Drug Administration for treatment of sexual complaints*

Source: Basson R., Berman J., Burnett A., et al 6

Early Postmenopause, (Cont.)

- ***Screen for mood, depression and anxiety***
 - Changes in mood, appetite and sexual functioning
 - Loss of concentration and/or memory
 - Prolonged tiredness, loss of interest in activities, sadness, suicidal thoughts, and/or irritability
 - Family history of mental illness
 - Previous response to psychotropic medications.

Early Postmenopause Evaluation

- ***Evaluate bone loss with BMD-spine is best***
 - ***Screen for incontinence***
 - Questions-frequency, nocturia, urgency, control of urine flow, and leakage
 - Examination – surgical scars, vaginal and pelvic prolapse, anal and circumvaginal sphincter muscle tone and perineum
 - Lab tests – postvoid residual and standard urinalysis
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Routine screening in all women

- ***Osteoporsis screening***
- ***Urogential c/o***
- ***Vulvovaginal health screening***
- ***Breast cancer screening***
- ***Thyroid function screening – TSH***

- ***Osteoporsis – BMD Measurement (Dual energy x-ray absorptiometry – DEXA)***
 - E2, BMD and Pepi trial data
 - Altrnative to E2 use-selective estrogen receptor modulator – SERM; Biphosphonates.

Breast Cancer Screening

- *Self exam strictly 40 years or more*
- *Mammogram – false positive 10-15%*
- *S/S of Breast cancer*
 - Mass
 - Local thickening
 - Skin irritation
- *Nipple*
 - Bloody discharge
 - Retraction
 - Irritation
 - Scaling
 - Pain
- *Survival better in HRT users and breast cancer*
- *Tumors are:*
 - Lower grade
 - Lower stage
 - Less aggressive

Diagnosing vaginal atrophy

Signs on physical exam

- *Pale, smooth, or shiny vaginal epithelium*
- *Loss of elasticity or turgor of skin*
- *Sparsity of pubic hair*
- *Dryness of labia*
- *Fusion of labia minora*
- *Introital stenosis*
- *Friable, unrugated epithelium*
- *Pelvic organ prolapse*
- *Rectocele*
- *Vulvar dermatoses*
- *Vulvar lesions*
- *Vulvar patch erythema*
- *Petechiae of epithelium*

Diagnosing vaginal atrophy

■ *Symptoms*

- Dryness
- Itching
- Dyspareunia
- Burning discharge
- Vulvar pruritus
- Feeling of pressure
- Yellow malodorous discharge

Concomittant Medications

- ***GERD affects half of peri and post menopausal women***
 - Esomeperazole; Omeperazole; calcium carbonate, etc.
- ***Depleting bone mass are:***
 - Corticosteroids
 - Anti-convulsants
 - Immunosuppressants
 - Thyroid supplements
 - Lithium
 - Heparin

Major Challenges to Physicians

Why Now???

Patients on alternative medicine

- *Fear of malignancy*
 - *Do not want to bleed regularly*
 - *Fear of side effects of weight gain and mastalgia*
 - *Most of them discontinue HRT in one year*
 - *Objection on social and cultural grounds*
 - *Want natural transition in life*
 - *Over the counter availability*
-

Major Challenges to Physicians

- ***ADVISING***
 - ***CHOOSING***
 - ***SAFETY***
 - ***EFFICACY***
 - ***FAMILY HISTORY OF BREAST
CANCER***
 - ***PAST HISTORY OF
THROMBOEMBOLIC DISEASE***
-

STATISTICS

- *The WHO estimates 1.2 billion females 50 or over by 2030*
- *Tripled from 1990*

Financial

- *Approximately \$30 million spent on alternative medicine cut out of pocket*
 - *NHI spent \$22 million on research*
 - *Exceeds out-of-pocket dollars for all physician services in 1 year*
 - *The majority of the studies and observations on the subject are from North American menopause society*
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Primary Symptoms

- *Hot flashes and sleep disturbances increased in USA, UK and UAE*
- *Joint Pain – Increased in India, Japan and Singapore*
- *Loss of libido increased in South America*

Within USA (racial/ethnicity)

- *African American – hot flashes*
- *Caucasian – Psychosomatic*
- *Hispanic – Vaginal and Urinary complaints*
- *Japanese - Forgetfulness*

Combination of Alternative Drugs or Botanical

■ *Definition*

- **COMPLIMENTARY MEDICINE** medicine –
Not an integral part of conventional medicine
 - Systems
 - Practices
 - Interventions
 - Modalities
 - Professions
 - Therapies
 - Applications

Combination of Alternative Drugs or Botanical

- ***Alternative medicine***
 - Not taught in medical institutions
 - Biology based therapies
 - Predictors for change
 - Dissatisfaction with conventional medicine
 - Over-the-counter accessibility
 - Alternative medicine as more compatible (personal, ethnic, religion, beliefs)

Combination of Alternative Drugs or Botanical

- ***Conventional medicine***
 - Medical doctors
 - Osteopaths
 - Applied health professionals

National Center of Complimentary and Alternative Medicine

- *Biology based*
 - *Mind and body*
 - *Energy*
 - *Manipulation and body-based therapy*
 - *Medical system*
-

Biology Based

- *Botanicals*
- *Animal derivative extracts*
- *Vitamins*
- *Minerals*
- *Fatty acids*
- *Amino acids*
- *Proteins*
- *Probiotics*
- *Whole diets*
- *Functional food*

Mind, Body, Behavior

(Self-training or in a group)

- ***Emotional***
 - ***Mental***
 - ***Social***
 - ***Spiritual***
 - ***Enhances and Respects***
 - *Self-knowledge, Self-care*
 - *Positive attitude*
-

Energy

- ***Veritable energy***
 - *Mechanical vibration*
 - *Sound and electromagnetic field*
 - *Transcutaneous nerve stimulation, units or magnets*
- ***Putative***
 - *Infusion of subtle form of energy*
 - *Example-Reiki*
 - *Results – changes in physical body to influence*

Manipulative and Body Based

- ***Chiropractic***
- ***Osteopathic manipulation***
- ***Massage***
- ***Feldenkrais***
- ***Rolfing***

Medical

- ***Allopathic medicine***
- ***Different cultures***
 - ***Chinese – Traditional medicine***
 - ***Indian – Ayurvedic and homeopathic medicine***
 - ***Western – Homeopathic and naturopathy***
 - ***Native American***
 - ***African***
 - ***Middle Eastern***
 - ***Central and South American***
- ***CONVENTIONAL MEDICINE***
 - ***Selective serotonin reuptake inhibitors (SSRIs)***

Combination of Alternative Drugs or Botanical / Conventional Medicine

+

■ *Mind – Body – Behavior*
= *Best*

Botanicals and Dietary Supplements (BDS)

- ***Dietary supplement health education (DSHEA)***
 - Not for diagnosis, prevention or treatment
 - Not FDA regulated
 - Results into variable
 - Content
 - Standardization
 - Dosage
 - Purity
 - Possible contamination

Germany – Controls through commission E (similar to FDA)

Main Products Vasomotor Symptoms (HOT FLASHES)

- ***Soy products/Isoflavones***
 - Whole foods
 - Soy protein isolates
 - Isoflavone isolates (as powders, pills)

Main Products Vasomotor Symptoms - SOY

■ *Mechanics of Action*

- Not well understood
- ? – Selective estrogen receptor modulators (SERMs) may be safe for breast and endometrial cancer

Main Products Vasomotor Symptoms - SOY

■ *Biological Ingredients*

■ Phytoestrogens

- Isoflavones

- Lignans

- Coumestans

Main Products Vasomotor Symptoms - SOY

- ***Positive affect on Lipids FDA approved, 25 gram soy protein capsule***
 - Decrease LDL and triglyceride
 - Increases HDL

Main Products Vasomotor Symptoms - Soy

■ *Bone Data*

- Animal studies – very positive
- Human studies – Modest, but significant
 - Chinese women with decreased BMD=increased BMD on high soy extracts
- Rich in gamma-linoleic acid (GLA)
- Contains anticoagulant substance

Main Products Vasomotor Symptoms - Soy

■ ***Cognitive Function (SOPHIA Study)***

- Increased verbal memory
- Increased tracking
- Increased attention

■ ***Soy, Breast Cancer & Endometrial Cancer***

- Animal study is equal to 25-50% decreased tumor and Cancer
- Human Study is equal to mixed evidence:
 - Protective of breast
 - Asian female = decreased breast cancer
 - Japanese (when in US) = increased breast cancer
- Several factors involved
 - Early age of conception
 - Low-fat diet
 - High-fiber diet
 - Less sedentary life

Main Products Vasomotor Symptoms

- ***Conclusion on Soy Products***
 - Data is minimal
 - Potential beneficial effects
 - Bone
 - Cognition
 - Cardiovascular
 - Soy beneficial for perimenopausal and postmenopausal females

Evening Primrose (Oenothera Biennis)

- ***Commercial preparation is equal to 72% linoleic acid (LA) plus 4% GLA***
- ***500 mg capsule is equal to 365 mg LA and 45 mg GLA***
- ***GLA – Found in placenta and breast milk***
- ***Natural fatty acid for humans***
- ***Gynecologic indications of GLA***
 - ***Menopausal symptoms***
 - ***Mastalgia***
 - ***Mastodynia***
 - ***PMS***
 - ***Bladder symptoms***

Evening Primrose (Gamolinic Acid)

- ***Decreases vasomotor symptoms***
- ***Studies not convincing***

Red Clover (*Trifolium Pratense*)

- ***Antispasmodic***
- ***Anticancer***
- ***Most common product Promensil (40 mg of Isoflavone in 500 mg tablets)***
 - Very well known for hot flashes
- ***Isoflavone Clover Extract Study (ICE study)***
 - Promensil with faster relief of hot flashes than placebo
 - Benefits
 - Prevention of Osteoporosis
 - Lipid profile
 - Modest affect on increased BMD
 - No difference in breast density

Red Clover

■ **Conclusion**

- Disappointing evidence ___ to decrease menopausal symptoms
- More studies needed for positive affect on:
 - Osteoporosis
 - Heart disease
 - Cognition
- Positive or negative affects on Endometrium and breast tissue:
 - Safe
 - Side effects are mild
 - Headache, Myalgia, and Nausea

Main Products Vasomotor Symptoms

■ ***Dong Quai (Angelica Sinesis)***

- ***Female tonic –Merck introduced in 1899 (Eumerol)***
 - ***Used for menstrual disorder***
 - ***“Tonify blood”***
 - ***Do not support estrogenic activity/estrogen mechanism***
 - ***No affect on uterus***
- ***Conclusion***
 - ***Used in multibotanical formations***
 - ***Considered a valuble female tonic by herbalists around the world***

Mood Disturbances

■ ***Common mood disturbances***

- Sleep
- Nervousness
- Depression
- Mood Swings
- Memory Loss

■ ***Common Botanicals & Botanical Products***

- St. John's Wort
 - Valerian Root
 - Ginko Biloba
 - Ginseng
 - Kava Hops
-

St. John's Wort (*Hypericum Perforatum*)

■ ***Depression***

- Nonmenopausal
- Studies show little affect
 - Major depression – antidepressants better

■ ***Climacteric (900 mg for 12 weeks)***

- Improved Psychological status
 - Psychosomatic
 - Sexual life
 - Psycho vegetative disorder
-

St. John's Wort

- ***Adverse reactions and interactions***
 - Anticoagulants
 - Cyclosporins
 - Digoxin
 - Protease inhibitor (HIV)
 - Decreased concentration of above
 - BTB with BCP – unplanned pregnancy

St. John's Wort

■ ***Side effects***

- Dry mouth
- Dizziness
- Constipation

■ ***Contents***

- Hypericin
- Pseudo Hypericin

■ ***Mechanism***

- MAO (monoamine oxidase inhibition)
 - Supercortico releasing hormone
 - Serotonin receptor blockade
-

Valerian Root (Garden Heliotrope)

- *Greek, Roman, Chinese, European and American Indians for centuries*
- *GABA derivative*
- *Tranquilizer; Supraphoric; Sleep*
- *Similar to Chamomile*
- *Used before Barbituates, benzodiazepines were found*
- *Approved by German Commission E (GCE)*
- *No drug interactions*

Valerian Root

■ *Side Affects*

- Nausea
- Headache
- Dizziness
- Upset stomach
- Dystonia
- Visual Disturbances
- Contraindicated in pregnancy and lactation

PMS and Early Menopause Symptoms

- ***Chase Tree/Vitex***
- ***Wild Yam***
- ***Evening Primrose***
- ***KAVA***
- ***HOPS***

Chase Tree/Vitex

- ***Approved by German Health Authority (GCE) for:***
 - PMS
 - Breast tenderness, menstrual irregularity
- ***Mechanism***
 - Progesterone-like activity
- ***Available***
 - Combinations with Black Cohosh and other herbs

Wild Yam (Colic Root)

- ***Gastrointestinal irritation, spasm, menstrual cramps, postpartum pain***
- ***Menopause (no evidence)***
- ***Mexican yam more estrogenic***
- ***Contains Diosgenin***

Ginkgo Biloba

- ***Improves blood flow***
- ***Raynaud's Syndrome (cold hands and feet)***
- ***Approved by GCE for***
 - Cerebral insufficiency
 - Vertigo
 - Tinnitus
 - Peripheral vascular disease

Mother Wart (Antispasmodic Nervine)

- ***Historic use***
- ***Palpitations – calm heart***
- ***GCE Approved***
 - Nervous conditions
 - Cardiac disorders
 - Hyperthyroid
 - Postmenopausal woman
 - Combination with Black Cohosh

GENSENG

German Commission – E (GCE)

- ***Defines as “a tonic for invigoration and fortification in times of fatigue and debility and for declining capacity for work and concentration.”***

Ginseng

- ***Positive affect cont'd***
 - Athletic performance
 - Weight loss
 - Antioxidant effect
 - Decrease disease
 - Decrease Cancer
 - No active ingredient
- ***Negative affect***
 - No vasomotor relief
 - Breast tissue proliferation

Ginseng (tonic-herb, panax ginseng)

■ *Types*

- Siberian
- Korean
- American
- White and Red

■ *Indication*

- Positive effect
 - Stress
 - Boost immunity
 - Aphrodisiac
-

Kava (South Pacific herb)

- **Anxiety**
- **Banned in Canada, Australia and several European countries**
- **Warned by the FDA and American Botanical Society**
 - **Side effects**
 - Hepatotoxic
 - Toxic Alkaloid
 - **Contraindicated**
 - Alcoholism
 - Hepatotoxic medicine
 - Hepatic problems

HOPS (Phytoestrogens)

- **German Commission E – approved**
- **Indications:**
 - Mood disturbance
 - Anxiety
 - Restlessness
 - Sleep disturbances
- **Mechanism:**
 - Binds E2 receptors
 - No SERM activity
 - ?Safe and effective

Valerian

- ***Used for hundreds of years by Chinese, Romans, Greeks, Europeans, and American Indians***
- ***GCE approved for***
 - Unrest
 - Nervous sleep disorder
- ***Side effects***
 - Nausea
 - Headache
 - Dizziness
 - Upset stomach (minimal)

BLACK COHOSH (*Cimicifuga racemosa*)

MECHANISM

Serotonergic than Estrogenic

CONTENTS

Glycosides, flavonoids, aromatic acids

RESEARCHED (GCE – 1940's)

Top selling in Germany

Approved = 40 mg/day x 6 mths

SIDE EFFECTS – Mild gastric complaints

High doses – Headache

Vomiting

Dizziness

NIH – Monitor LFT

- ***“At this time there is no known mechanism with biological plausibility that explains any hepatotoxic activity of black cohosh.”***

Summary (Black Cohosh)

- ***Great promise***
- ***Excellent for breast cancer***
- ***Relieves menopausal symptoms, mood disturbance, sleep disorder, PMS, dysmenorrhea, anxiety, depression***

Contraindications

- ***Pregnancy and lactation***
-

Loss of Libido / Vaginal Dryness / Dyspareunia

- ***Chasteberry (vitex, Monk's pepper, agnus, chaste tree, wild pepper, indian spice, sage tree hemp)***
- ***Indications:***
 - Vaginal dryness
 - Depression
 - Antiandrogenic effect
 - Increased libido in female
 - Decreased libido in male
- ***Mechanism: inhibits prolactin***

Libido (continued)

- ***Ginseng***
 - Increases athletic activity
 - Increases positive attitude
 - = **positive self-image**
 - = **increased libido**

Conventional Medicine

(Prescribed by MDs, Osteopath and Health Professionals)

■ ***Antidepressants***

- SSRI's – Selective serotonin reuptake inhibitors
- SNRI's – Selective serotonin norepinephrine reuptake inhibitors

Conventional Medicine

■ ***Antidepressants***

- Venlafaxine ex. Effexor
- Paroxetine
- Fluoxetine
- Duloxetine

■ ***Anticonvulsants***

- Gabapentin

■ ***Hormones***

- Progestin
 - Tibolone
-

Conventional Medicine

Antihypertensive

- Clonidine
- Methyldopa
- Veralipride

■ ***Sedative and Antispasmodic***

- Bellegral
 - Phenobarbital
 - Ergotamine
 - Levorotatory
 - Alkaloids of Belladonna

■ ***Vitammins***

- Vitamin E
-

Antidepressants

■ ***Venlafaxine***

■ Indications

- Vastly studies in breast cancer survivors
- Severe hot flashes from chemotherapy
- Hot flashes from Tamoxifen
- Breast cancer patients not allowed any estrogens
- Indicated in male patient with prostate cancer

Antidepressants

■ *Venlafaxine*

■ Dose

- Start with 37.5 mg – no response, increase to 75 mg per day
- 150 mg is more toxic
- 80 – 90% response with 37.5 mg to 75 mg per day
- Estrogen takes weeks - Venlafaxine takes days

Antidepressants

■ ***Venlafaxine***

■ Mechanism

- Same as tricyclic antidepressant (SSRIs & SNRIs)

■ Side effects (at 75 mg/day)

- Mouth dryness
- Anorexia
- Nausea
- Sexual dysfunction
- Constipation
- Dizziness
- Somnolence
- High dose – High BP

Antidepressants

- ***Venlafaxine***
 - **Contraindications**
 - MAO inhibitors

Antidepressants

■ ***Paroxetine***

- SSRI
- Dose
 - 12.5 to 25.0 mg per day for 6 weeks
- Contraindication
 - MAO indicators
 - Thioridazine
 - Warfarin
- Side effects
 - Asthenia
 - Sweating
 - Dizziness
 - Insomnia
 - Somnolence
 - Nausea
 - Decreased appetite

Antidepressants

■ ***Fluoxetine***

- SSRI
- FDA indications—depression, PMS dysphoric disorder
- Used for hot flashes
- Dose - 20 mg per day
- Duration – 4 to 8 weeks
 - Response is better to Venlafaxine

Anticonvulsant

■ ***Gabapentin***

■ Mechanism

- Unknown
- Approved for seizure and post herpetic neuralgia
- Effective in hot flashes
- Combined with SSRIs = no difference

■ Dose

- Start at 100, maximum 300-600 mg hs
 - Reduces daytime hot flashes
 - Soporific affect
 - Minimizes side effects
-

Anticonvulsant

- ***Gabapentin***
 - Side effects
 - Headaches
 - Dizziness
 - Disorientation
 - Peripheral edema
 - Ataxia
 - Nystagmus

Anticonvulsant

■ *Gabapentin*

- Physiologic Action (GABA-600 mg)
 - Nocturnal hot flashes for 1st 4 hours
 - REM sleep suppresses next 4 hours
 - GABA increased action for 1st 4 hours
 - GABA blood level decreased early morning 4 hours
 - Results in awakening with decreased side effects and decreased levels

Hormones

■ *Progestins*

■ Mechanism

- Inhibit gonadotropin secretion
- Decreased endogenous hypothalamic opiate peptide activity
- Doses higher than HRT

Megace (Megestrol acetate)

- Synthetic progestin
 - Indicated for breast cancer treatment
 - 20-80 mg decreased hot flashes by 80%
 - 1st 2 weeks increase in hot flashes
-

Hormones

- ***Major side effects***

- Increased appetite
- Increased weight gain
- Adrenal insufficiency
- Uterine bleeding
- Precipitates diabetes
- Increase in thromboembolic event

Depomedroxyprogesterone Acetate (DMPA)

- ***Oral high doses (150 mg per month)***
- ***When given IM - 400 mg per month***
- ***Major side effects***
 - Uterine bleeding

Norethindrone acetate, Oral MPA

(Provera; Cycrin; Prometrium)

■ ***Dose***

- 10 mg per day to 20 mg per day for 12 weeks

■ ***Advantage***

- More compliant

■ ***Side effects***

- Weight gain
 - Uterine bleeding
 - Amenorrhea
 - Nervousness
-

Topical Progesterone

- ***North American Society (NAMS) do not recommend synthesized for soya beans and wild yam***
 - Varying dose and duration
 - Mixed with vitamins has decreased hot flashes
 - No adverse side effects

TIBOLONE

- Widely used in Europe
- Synthetic steroid
- Metabolites – Estrogenic
 - Androgenic
 - Progestenic

Beneficial Effects

BMD

Vasomotor

Less vaginal bleeding

Improved sexual function

Adverse Effects

Decreased HDL

Increased Stroke risk

ANTIHYPERTENSIVES

Clonidine

- ***Centrally active alpha-2 adrenergic agonist***
- ***Initial treatment in hypertension***
- ***Transdermally 0.1 mg per day X 1 week***
- ***No response – increase by 0.2 to 0.3 mg***
- ***Tablets 0.1 to 0.4 mg, 2-3 times / day***
- ***Excellent for tamoxifen-induced hot flashes***

Clonidine (continued)

Side Effects

- ***Dry mouth***
- ***Dizziness***
- ***Constipation***
- ***Sedation***
- ***Itchiness under the patch***
- ***Hypotension***
- ***Decreased pulse rate***
- ***Arrhythmia in high doses***

Contraindication

- ***Cardiac sinus node function impairment***

Methyldopa

Dose: 500 mg to 1,000 mg per day

- ***Modest improvement***

Contraindication

- ***Active hepatic disease***
- ***MAO inhibitors***
- ***Positive Coombs test***
- ***Hemolytic anemia***
- ***Liver disorder***

Side Effects

- ***Asthenia***
- ***Edema***
- ***Sedation***
- ***Headache***

Veralipride

- ***Dopamine antagonist***
- ***Used only in Europe***

Side Effects

- ***Extrapyramidal signs and symptoms***

Vitamin E

- Dose: 800 IU per day to 1200 IU per day***
- ***Nontoxic at low dose***
 - ***No harm in trying***
 - ***Effect takes weeks***
 - ***Cautious use with Vitamin K deficiency***

SEDATIVES AND ANTISPASMODICS

BELLERGAL (Belladonna Alkaloids)

- ***Older sedative and antispasmodic***

Variety

- ***Phenobarbital (barbiturate)***
- ***Ergotamine tartrate***
- ***Levo roto 3 alkaloid***

Contraindication

- ***CVS disease***
- ***Glaucoma***
- ***Hepatic disease***
- ***Reduces BCP efficiency***
- ***Reduces anticoagulant efficacy***
- ***Intoxication leads to death***
- ***Barbiturates are addictive***

NAMS (North American Menopausal Society)

Do not recommend

■ ***Botanical***

- Don quai Chinese herb mixtures
- Acupuncture
- Magnet treatment
- Evening primrose
- Ginseng
- Licorice

■ ***Drugs***

- Bellerгал
- Methyldopa

SUMMARY AND RECOMMENDATIONS

■ *Hot Flashes*

- Moderate to severe (no history of breast cancer or CVS disease)
 - Short term E2 treatment
 - 2 to 3 years
 - No more than 5 years
- Contraindicated or not tolerant to E2
 - Use SNRI/SSRI; Gabapentin
- Predominantly night time
 - Gabapentin single dose h.s.

SUMMARY AND RECOMMENDATIONS

■ *Hot Flashes*

- Predominantly day time
 - Use SNRI/SSRI, less sedation than Gabapentin (taper in 2 to 3 years)
- Hot Flashes gradually decrease with age
- Cautious use in tamoxifen cases
- History of breast cancer and hot flashes
 - No phytoestrogens or Black Cohosh

Discontinuation of Therapies

- ***Abrupt in mild to moderate***
- ***Gradual in severe***
 - Six months to one year

Information for Patients / MD'S

■ *Patient Education*

- Postmenopausal hormonal therapy

■ *Patient Information*

- Alternative to postmenopausal hormonal therapy

MD's

- Web site www.uptodate.com/patients
- SWAN (Study on Women's Health Nationwide)
- NAMS (North American Menopause Society)

Causes of Hot Flashes

- ***Physiologic***
 - Menopause
 - Hot drinks
 - Emotional distress
 - Anaphylaxis

Causes of Hot Flashes (cont'd)

■ *Drugs*

- Alcohol (in Asians)
- Alcohol used with chlorpromazine or disulfurum
- Diltiazem
- Amyl nitrate
- Nicotinic acid
- Levodopa
- Bromocriptine

Diseases

- ***Carcinoid Syndrome***
- ***Systematic mastosis***
- ***Basophilic Chronic Granulocytic Leukemia***
- ***VIPOMA***
- ***Pheochromocytoma***
- ***Medullary carcinoma of thyroid***
- ***Renal cell carcinoma***
- ***Diencephalic seizures***

CONCLUSION

MD to discuss with patients

- *“Natural” not an assurance of efficacy or safety*
- *Potential dangerous herb & drug interactions occur*
- *Lack of standardization result in variability of dose and contents*
- *Custom blended herbal preparations may result in toxic or leghal outcome*
- *Do not take larger or longer than recommended*

CONCLUSION (cont'd)

Alerts for MDs

- ***No PDR***
- ***Not FDA approved***
- ***Adverse events and outcomes must be reported to FDA***
- ***Document history of herbal & dietary supplements***
- ***Patient should be counseled for risk and benefits of conventional and alternative therapy***

CONCLUSION (cont'd)

Dispense

**RATIONALLY!
JUDICIOUSLY!
BALANCED MANNER!**

-
- ***Doctor: “Master, what must I do to be a great gynecologist?”***
 - ***The Master: “Ah, Lady Grasshopper, to be a great gynecologist, you must give women what they want. Here, watch this slide and you shall be enlightened.”***

“Thus, he blessed me along with other women.”

The New England Medical Journal





