

Hormone Therapy Unlocked: Case Studies in Diagnosing and Managing Hypoactive Sexual Desire Disorder and Menopausal Hormone Therapy

August 13, 2025 1:00 – 2:30 p.m. ET



Hormone Therapy Unlocked: Case Studies in Diagnosing and Managing Hypoactive Sexual Desire Disorder and Menopausal Hormone Therapy

August 13, 2025 1:00 – 2:30 p.m. ET



Welcome Remarks





Alna Gopez, MSN, BSN, RNC-OB

Training Specialist Lead, Continuing Education Program Office

> J-7 Education and Training Defense Health Agency (DHA) Falls Church, Va.



Event Details



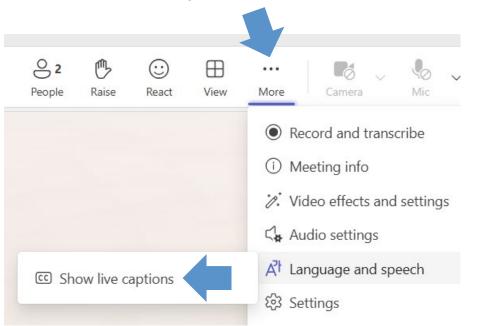
- ☐ Accessibility
- ☐ Chat/Questions
- ☐ How to Obtain CE/CME Credits



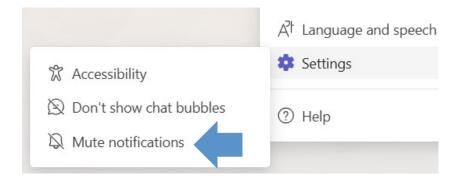
Accessibility in Microsoft Teams



Turn on live captions



To avoid pop-up messages, mute notifications

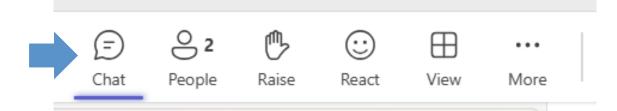




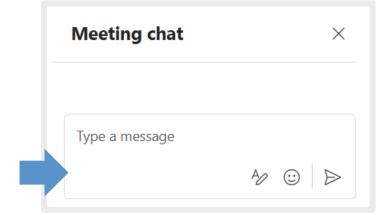
Chat and Questions



Access the MS Teams room "Chat" area to participate in the chat.



During the question-and-answer period following each session, enter your question into the "Chat" area.





How to Obtain CE/CME Credit



Special Feature Webinar: Hormone Therapy Unlocked: Case Studies in Diagnosing and Managing Hypoactive Sexual Desire Disorder and Menopausal Hormone Therapy

To claim CE/CME credit for this activity, complete the evaluation survey and posttest before the evaluation period ends on **Wednesday**, **August 27**, **2025**, **at 11:59 p.m. Eastern Time**.

Log in and complete the requirements:

https://www.dhaj7-cepo.com/user/login?destination=node/46848/takecourse.

For more information about the event, please visit the registration page.

Once you have been awarded credit, you can download your certificate anytime through <u>your account</u>. Any activity you register for but have yet to complete will be available under your <u>pending activities</u> until the evaluation period ends.

Questions? Email the DHA J-7 Continuing Education Program Office at dha.ncr.j7.mbx.cepo-cms-support@health.mil.



Hormone Therapy Unlocked: Case Studies in Diagnosing and Managing Hypoactive Sexual Desire Disorder and Menopausal Hormone Therapy

August 13, 2025 1:00 – 2:30 p.m. ET



Presenters



Air Force Lt. Col. Samantha Simpson, M.D., NCMP

Director, Reproductive Endocrinology and Infertility Division 959th Surgical Operations Squadron Joint Base San Antonio – Fort Sam Houston, Air Force Col. (ret.) Christine Hart Kress, DNP, APRN, WHNP-BC, MSCP

Women's Health Nurse Practitioner Certified Menopause Practitioner Centreville, Va.

Texas

Rebbecca Hertel, DO, MSCP

Family Physician and Certified
Menopause Practitioner
Founder, Osteopathic Midlife Health
Erie, PA.

Aoife O'Sullivan, M.D., NCMP

Family Physician and Certified Menopause Practitioner Founder, Portland Menopause Doc. Portland, OR Heather Quaile, DNP, WHNP-BC, MSCP, CSC, IF, FAANP

Founder, The Sexual Health Optimization and Wellness Center Kennesaw, Ga.



Air Force Lt. Col. Samantha Simpson, M.D., NCMP





Air Force Lt. Col. Samantha Simpson, M.D., NCMP is the Reproductive Endocrinology and Infertility division director at Brooke Army Medical Center, 959th Surgical Operations Squadron, Joint Base San Antonio – Fort Sam Houston, Texas. She oversees specialty care clinic patients, conducting over 1,200 office visits and 120 in vitro fertilization cycles annually. Lt Col Simpson also serves as the Obstetrics and Gynecology Residency Program Director, with administrative and clinical oversight of 24 obstetrics and gynecology residents. She is a Nationally Certified Menopause Practitioner by the Menopause Society.

Lt Col Simpson holds an Associate Professorship position at the Uniformed Services University of the Health Sciences (USUHS) Center and provides education and clinical teaching to 30 San Antonio Uniformed Services Health Education Consortium interns, 50 USUHS medical students, and her 24 obstetrics and gynecology residents, hoping to make them all advocates for women and clinical experts in perimenopause and menopause management.



Air Force Col. (ret.) Christine Hart Kress, DNP, APRN, WHNP-BC, NEA-BC, MSCP





Air Force Col. (ret.) Christine Hart Kress, DNP, APRN, WHNP-BC, NEA-BC, MSCP is a board-certified women's health nurse practitioner and certified menopause practitioner. She is the CEO and owner of a specialized telemedicine practice focused on comprehensive menopause and midlife care. Dr. Hart Kress is a seasoned healthcare leader with over 30 years of experience in women's health and 27 years of service in the Air Force as a nurse practitioner and healthcare executive. After retirement, she transitioned to a Chief Nursing Officer role in a hospital system then returned to clinical practice in gynecology. Her passion lies in transforming access to high-quality care for women in midlife and menopause. A published author in the field of women's health, Dr. Hart Kress has a large social media following and has been featured on multiple podcasts and blogs, sharing her expertise and insights. She is the co-host of the new podcast, "The Dusty Muffins." She has received numerous accolades for her clinical excellence and leadership, including the Air Force Medical Service Advanced Practice Nurse of the Year and Tucson's Fabulous 50 Nurses awards.



Rebbecca Hertel, DO, MSCP





Rebbecca Hertel, DO, MSCP is a board-certified osteopathic family medicine physician and certified menopause practitioner and the founder and CEO of Osteopathic Midlife Health, a telemedicine practice dedicated to midlife and menopause care. With over 20 years of expertise, Dr. Hertel has provided compassionate, patient-centered care across all life stages since completing her residency in 2009. A passionate advocate for women's health, she is committed to advancing education and awareness about the unique changes women experience during perimenopause and menopause. Dr. Hertel regularly teaches medical students, and she educates colleagues to improve understanding and care in family medicine. Beyond her clinical work, she delivers menopause education to providers, students, and communities through lectures, panels and podcasts. Dr. Hertel has a large social media presence on multiple platforms where she shares valuable insights, resources, and support to help women thrive in midlife and beyond. She is the co-host of the podcast, "The Dusty Muffins."



Aoife O'Sullivan, M.D., NCMP





Aoife O'Sullivan, M.D., NCMP is a board-certified family medicine and menopause certified practitioner. She is the founder of Portland Menopause Doc, a telemedicine practice. Originally trained in Ireland, she completed a family medicine residency there before moving to the United States in 2004, where she completed a second residency at the University of Maryland. Dr. O'Sullivan has over 30 years of experience and is specialized in the comprehensive care of midlife women. She is passionate about addressing the longstanding gaps in menopause education and care, delivering educational lectures in graduate medical education programs, medical societies and professional organizations, but also to lay businesses and the community throughout Oregon and Washington. An influential voice in the digital health space, Dr. O'Sullivan is active on social media where she empowers women with knowledge and inspires dialogue about midlife health. She is the co-host of the new podcast, "The Dusty Muffins."



Heather C. Quaile, DNP, WHNP-BC, MSCP, CSC, I.F., FAANP





Heather C. Quaile, DNP, WHNP-BC, MSCP, CSC, I.F., FAANP is a clinical and academic leader and entrepreneur. She is the founder, Owner and Clinical Director of The SHOW Center, a women's health and sexual medicine practice. Dr. Quaile is a double board-certified, women's health nurse practitioner and advanced forensic nurse specializing in human trafficking and female sexual health, she created and implemented a medical program, the first of its kind emergency stabilization for commercial sexual exploitation of youth in Georgia. Additionally, she is also a certified menopause practitioner, trained and certified as an American Association of Sexuality Educators. Counselors and Therapists (AASECT) sex counselor and sexual assault nurse examiner providing sexual health education, traumainformed care, and information to patients of all ages. Dr. Quaile has been working in all aspects of women's healthcare for over 23 years caring for women of all ages across the health-illness continuum. Her social media is full of medical education @drquailenp. She is the founder and co-host of the podcast, "justASK."



Disclosures



- Lt Col Simpson, Dr. Hertel, Dr. O'Sullivan, Dr. Hart Kress and Dr. Quaile have no relevant financial or non-financial relationships to disclose relating to the content of this activity.
- Presenters discuss off-label use of Testosterone.
- The views expressed in this presentation are those of the author and do not necessarily reflect the official policy or position of the Department of Defense, nor the U.S. Government.
- This continuing education activity is managed and accredited by the Defense Health Agency, J-7, Continuing Education Program Office (DHA, J-7, CEPO). DHA, J-7, CEPO and all accrediting organizations do not support or endorse any product or service mentioned in this activity.
- DHA, J-7, CEPO staff, as well as activity planners and reviewers have no relevant financial or non-financial interest to disclose.
- Commercial support was not received for this activity.



Polling Question #1



Did you attend the live Clinical Communities Speaker Series presentation "Hormone Therapy Unlocked: Overcoming Barriers to Better Care" on February 20, 2025?

- Yes
- No

Respond by phone:



Or visit: pollev.com/cepo



Polling Question #2



If you did attend the presentation on February 20, have you applied changes to your clinical practice based on the information you learned?

- Yes
- No



Learning Objectives



At the end of this presentation, participants will be able to:

- 1. Assess suitability for menopausal hormone therapy (MHT) in women with chronic disease, using a thorough history and risk stratification based on current guidelines.
- 2. Discuss the safety profile of MHT in the context of comorbidities, including cardiovascular risk, breast cancer risk, and the role of the timing hypothesis and the type of hormone used (e.g., transdermal vs oral).
- **3. Formulate an individualized MHT plan and follow-up protocol**, selecting the appropriate estrogen route/dose and progestogen (if uterus is intact), while considering the symptom burden and risk profile. Review optimization and adjustments during therapy.
- **4. Recognize the clinical significance of untreated vasomotor symptoms**, including the impact on sleep, quality of life, work productivity, and the association between persistent hot flashes and increased risks of cardiovascular disease, bone loss, and cognitive decline.



Case Study #1



Navigating Vasomotor Symptoms (VMS) in a Menopausal Woman with Cardiometabolic Risks and Thrombophilia

A case study exploring evidence-based approaches for managing severe menopausal symptoms in a patient with complex comorbidities.



Patient Overview (Case Study #1)



Maria L.

- 54-year-old office manager
- Postmenopausal (last period 2.5 years ago)
- Severe hot flashes and night sweats
- Maria experiences 3-5 moderate to severe hot flashes daily interferes with her ability to perform her job, self-confidence.
- She wakes multiple times a night due to temperature fluctuations and 3-4 times a week has drenching night sweats where she has to get up and change her clothes and sometimes her sheets - she is exhausted and mood and appetite are also affected from this lack of sleep.
- Quality of life significantly impacted



What are Vasomotor Symptoms?



- Definition: Episodic sensations of heat (hot flashes) and sweating (night sweats), often with flushing or palpitations, caused by thermoregulatory disruption.
- Etiology: Multifactorial, involving estrogen deficiency and risk factors like obesity, smoking, and anxiety.
- Pathophysiology:
 - KNDy neurons in the hypothalamic arcuate nucleus regulate gonadotropinreleasing hormone (GnRH) and luteinizing hormone (LH) secretion
 - Declining estrogen causes KNDy hyperactivity, increasing NKB and kisspeptin, and disrupting thermoregulation via the preoptic area.
 - This triggers inappropriate heat dissipation (hot flashes).
- Affect up to 85% of midlife women
- Can persist for 7–10 years or more
- Most common menopause-related symptom
- Substantial variability in frequency, severity, and duration among individuals



Medical History & Comorbidities



Cardiovascular

- Hypertension (lisinopril)
- Hyperlipidemia (atorvastatin)
- BP: 138/84 mmHg

Genetic

- Heterozygous Factor V Leiden mutation
- No history of venous thromboembolism (VTE)

Metabolic

- Type 2 Diabetes (metformin)
- HbA1c: 7.2%
- BMI: 31

Endocrine

- Hypothyroidism (levothyroxine 75 mcg)
- TSH: 2.1 mIU/L



Laboratory Findings



Follicle-stimulating hormone (FSH)

72 IU/L

Suggests postmenopausal status

Estradiol

<20 pg/mL

Consistent with menopause

HbA1c

7.2%

Suboptimal glycemic control

Low-density lipoprotein (LDL)

143 mg/dL

Above target range

Thyroid-stimulating hormone (TSH)

2.1 mIU/L

Within normal range

Laboratory values confirm postmenopausal status and indicate suboptimal control of cardiometabolic parameters.



Key Clinical Questions



- 1. Is she a good candidate for hormone therapy?
- 2. Which are the safest treatment options given her co-morbidities?
- 3. How can we prioritize quality of life without increasing cardiovascular or thrombotic risk?



Clinical Risk Assessment



Cardiometabolic Risk Profile

Hypertension, hyperlipidemia, and diabetes increase baseline cardiovascular risk.

Thrombotic Risk

Factor V Leiden mutation and obesity (BMI 31) elevate thrombosis risk.

Medication Interactions

 Oral estrogen can increase thyroid-binding globulin, potentially interfering with levothyroxine efficacy.

Important Note: Transdermal MHT is **not contraindicated** in this patient. It is considered **first-line and safest** for women with hypertension, thrombophilia, and thyroid medication use. Oral estrogen can increase thyroid-binding globulin and interfere with thyroid regulation.



Why Treat VMS?



- Impaired quality of life: Sleep disruption, daily function affected, and mood disturbances, selfconfidence, ability to work, affect intimate relationships
- Cognitive complaints: Decreased verbal memory, focus, concentration. Word-finding difficulties.
 Memory problems.
- **Bone health**: Bone density loss and osteoporosis
- Cardiovascular risks:
 - a. Evidence from SWAN and meta-analyses link persistent/severe VMS with:
 - i. Hypertension
 - ii. Insulin resistance
 - iii. Dyslipidemia
 - iv. Carotid intima-media thickness (atherosclerosis)
 - v. Aortic calcification
 - vi. Greater risk of coronary artery disease and stroke
 - b. Severity (not just frequency) correlates with adverse CV outcomes
 - c. Supported by American Heart Association and pooled cohort studies

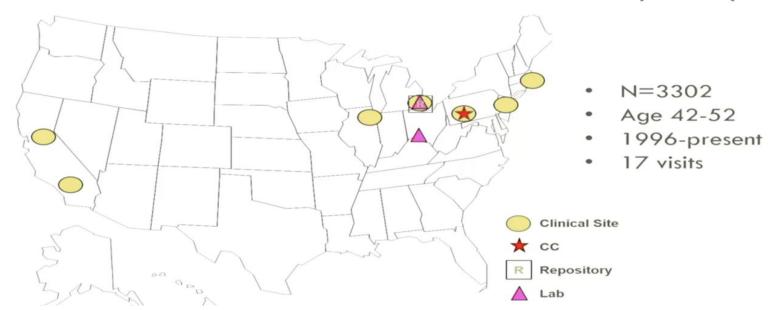


Why Treat VMS?, continued



STUDY OF WOMEN'S HEALTH ACROSS THE NATION (SWAN)





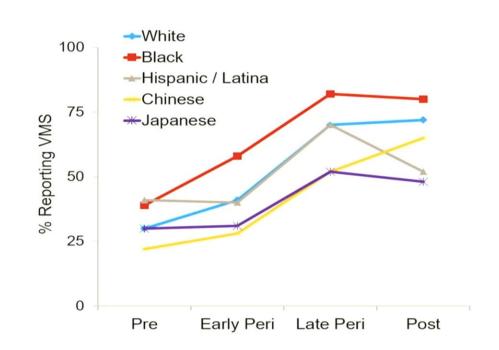


SWAN: VMS over the Menopause Transition



SWAN:
VASOMOTOR
SYMPTOMS (VMS)
OVER THE
MENOPAUSE
TRANSITION

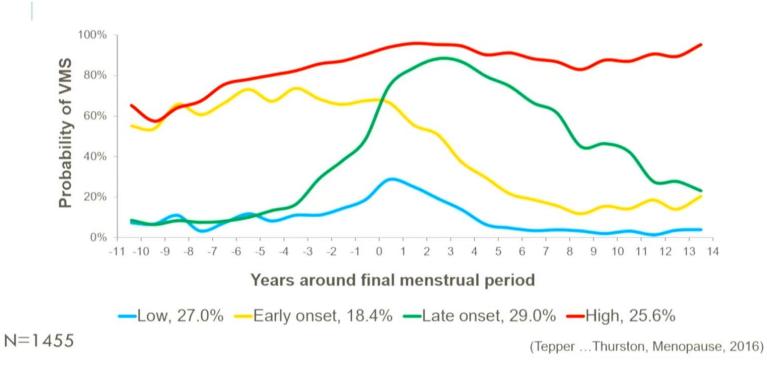
(Gold et al., 2006, AJPH)





Trajectories of VMS



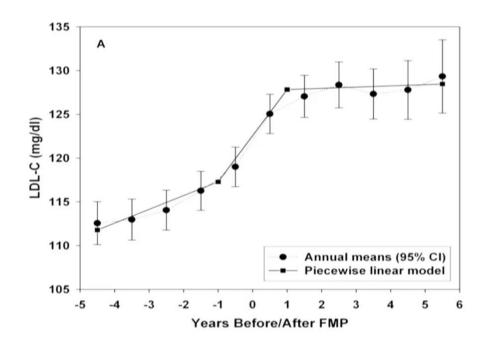


29



Rise in LDL Cholesterol within One Year of the Final Menstrual Period (FMP)



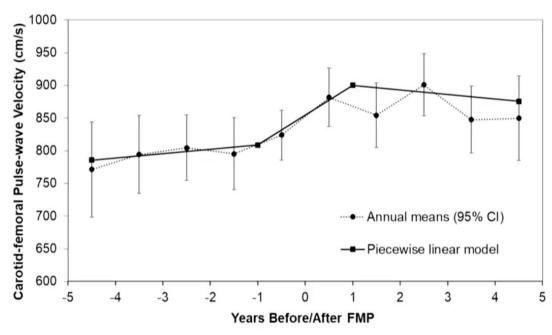


(Matthews 2009 JACC)



Increase in Vascular Stiffness





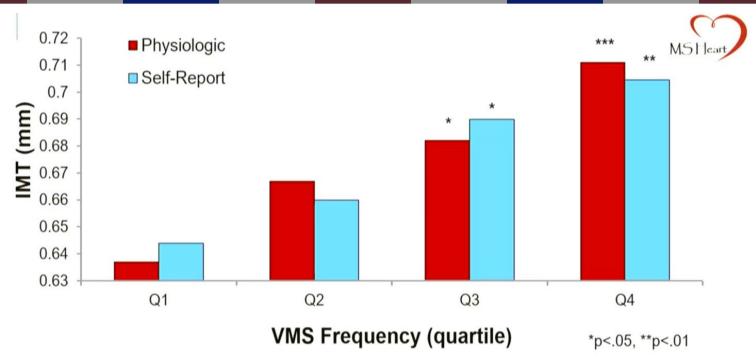
Annual mean values compared with estimated values from piecewise linear model Covariates: Age at FMP, race, site, HT, smoking, SBP, waist circumference, LDL cholesterol

(Samargandy et al, 2020, ATVB)



VMS Associated with Greater Atherosclerosis (IMT)





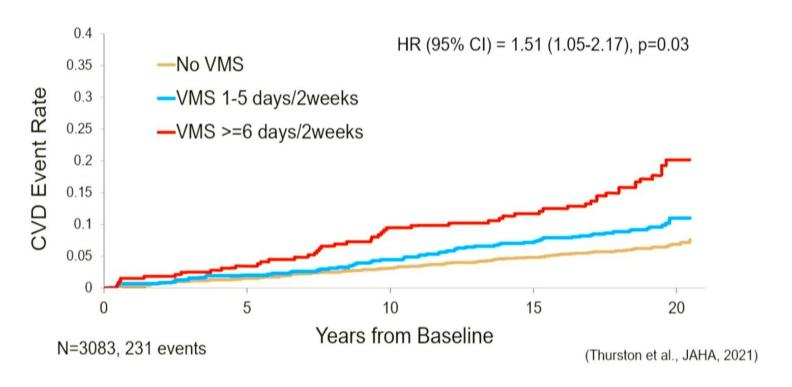
Adjusted for age, race, education, BMI, SBP, DBP, HDL, LDL, HOMA index, hypertension meds, diabetes meds, lipid meds

(Thurston et al., 2016, Stroke)



VMS Linked to Risk of Cardiovascular Disease (CVD) Events

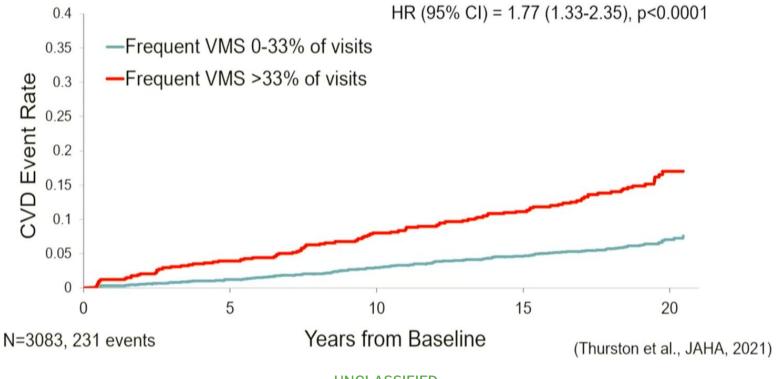






Persistent VMS Associated with >70% Increased Risk of CVD Event

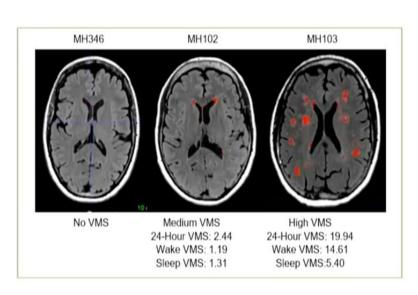


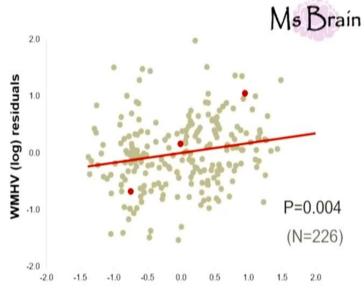




VMS, Particularly Objective Sleep VMS, Associated with Great Brain White Matter Hyperintensities







Sleep physiologic VMS (log) residuals

(Thurston, Wu, Aizenstein, .. Maki, Neurology, 2023)



Treatment Options



Oral Estrogen - Not Recommended

- Elevated VTE risk with Factor V Leiden
- Interferes with thyroid medication

Transdermal HT - Preferred Option

- 17β-estradiol patch + micronized progesterone
- Bypasses first-pass hepatic metabolism
- Safest option for increased VTE risk, hypothyroidism

Non-Hormonal Therapies - Alternative Options

- Fezolinetant (Veozah)
- Selective serotonin reuptake inhibitors (SSRIs)/Serotonin and norepinephrine reuptake inhibitors (SNRIs) (low-dose paroxetine, venlafaxine)
- Gabapentin (sleep, night sweats)
- Cognitive Behavioral Therapy



Patient Counseling & Monitoring



Key Counseling Points

- Transdermal estrogen avoids hepatic metabolism
- No increased VTE risk with transdermal route
- No interference with thyroid-binding globulin
- Shared decision-making essential

Monitoring Plan

- Follow BP, TSH and HbA1c as usual
- Symptom tracking very important
- Follow-up on medication adherence and side effects



Key Takeaways



Individualized Assessment

 Vasomotor symptoms significantly impact quality of life and warrant evidence-based intervention.

Route Matters

 Transdermal MHT is safe and effective in patients with hypertension, thrombophilia, and thyroid disease.

Multiple Options

 Non-hormonal therapies can be considered but transdermal HT is not contraindicated in this case.

Evidence-Based Approach

• Treatment decisions should align with current National Academy of Medical Sciences (NAMS) guidelines and patient preferences.



Learning Objectives



- 1. Identify diagnostic criteria for Hypoactive Sexual Desire Disorder (HSDD) and demonstrate the ability to use validated tools like the Decreased Sexual Desire Screener to guide clinical decision-making.
- 2. Evaluate candidacy for testosterone therapy in women with HSDD by reviewing baseline labs (including total/free testosterone, sex hormone binding globule) and assessing informed consent for off-label use.
- 3. Explain the evidence, risks, and benefits of testosterone therapy in women and design a follow-up plan, including Food and Drug Administration (FDA)-approved options and monitoring protocols for labs, efficacy, and side effects.
- **4. Discuss patient-centered approaches** to managing HSDD, incorporating biopsychosocial elements, sexual health counseling, and shared decision-making.



Case Study #2



Hypoactive Sexual Desire Disorder (HSDD): Hormonal and Nonhormonal Treatments

A Case Study exploring treatment of a perimenopausal woman with HSDD impacting her quality of life and relationship.



Patient Overview (Case Study #2)



Sarah

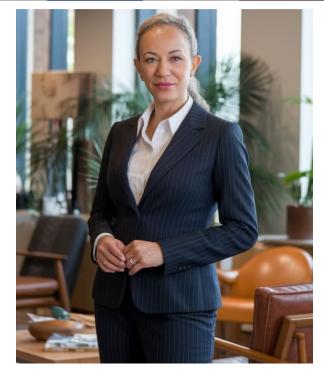
- 49-year-old Female Marketing Executive
- Perimenopausal
- Normal physical exam with some genitourinary syndrome of menopause
- No current medications
- Past Medical History: Hyperlipidemia (TC 220, LDL 140, TG 90)
- Lab Results: Total Testosterone 17, Estradiol 90

Initial Approach:

"Are there any sexual concerns you wish to discuss?"

Patient Response:

"I have no desire to have sex which is causing a strain with my partner who started testosterone and wants to have sex all the time. I could ake or leave sex for years eve though I enjoy it when I engage."



(ChatGPT generated, 2025)



Key Clinical Information



- Previously interested in sex when initially married (acquired issue)
- Current lack of interest causing personal distress
- Relationship impact reported
- No other sexual function issues reported



Does Sarah Have HSDD?



Diagnostic Approach

O Consider using a validated assessment instrument

Decreased Sexual Desire Screener

- Brief, self-completed questionnaire
- Clinically validated tool
- Effective in identifying HSDD
- O User-friendly format for clinical practice



Decreased Sexual Desire Screener (DSDS)



- 1. In the past was your level of sexual desire or interest good and satisfying to you?
- 2. Has there been a decrease in your level of sexual desire or interest?
- 3. Are you bothered by your decreased level of sexual desire or interest?
- 4. Would you like your level of sexual desire or interest to increase?
- 5. Please check all the factors that you feel may be contributing to your current decrease in sexual desire or interest:
 - A. An operation, depression, injuries or other medical condition
 - B. Medication, drugs or alcohol you are currently taking
 - C. Pregnancy, recent childbirth, menopausal symptoms
 - D. Other sexual issues you may be having (pain, decreased arousal or orgasm)
- E. Your partner's sexual problems
- F. Dissatisfaction with your relationship or partner
- G. Stress or fatigue

Clinician:

Verify with the patient each of the answers she has given.

The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision, characterizes Hypoactive Sexual Desire Disorder (HSDD) as a deficiency or absence of sexual fantasies and desire for sexual activity, which causes marked distress or interpersonal difficulty, and which is not better accounted for by a medical, substance-related, psychiatric, or other sexual condition. HSDD can be either generalized (not limited to certain types of stimulations, or partners) or situational, and can be either acquired (develops only after a period of normal functioning) or lifelong.

- If the patient answers "NO" to any of the questions 1 through 4, then she does not qualify for the diagnosis of generalized acquired HSDD.
- If the patient answers "YES" to all of the questions 1 through 4, and your review confirms "NO" answers to all of the factors in question 5, then she does qualify for the diagnosis of generalized acquired HSDD.
- If the patient answers "YES" to all of the questions 1 through 4 and "YES" to any of the factors in question 5, then decide if the answers to question 5 indicate a primary diagnosis other than generalized acquired HSDD. Co-morbid conditions such as arousal or organic disorder do not rule out a concurrent diagnosis of HSDD.

Based on the above, does the patient have generalized acquired Hypoactive Sexual Desire Disorder?
YES NO



Decreased Sexual Desire Screener (DSDS), continued



Diagnostic Algorithm

NO to any questions 1-4

Not generalized acquired HSDD

Positive Diagnosis

YES to all questions 1-4 and NO to all question 5 factors =

Generalized acquired HSDD

Clinical Judgment

YES to all questions 1-4
and
YES to any question 5 factor
=
Clinician determination

The DSDS typically takes less than 15 minutes to complete, with 84% sensitivity and 88% specificity in clinical validation studies.

This figure was published in the Journal of Sexual Medicine, Vol 6. Clayton AH, Goldfischer ER, Goldstein I, et al. Validation of the decreased sexual desire screener (DSDS): a brief diagnostic instrument for generalized acquired female hypoactive sexual desire disorder (HSDD). Copyright Elsevier 2009.



R/O Other Things That Impact Desire



Medications

- Cardiovascular/antihypertensives
- Hormonal treatments
- Psychotropics
- Narcotics
- H2 blockers/promotility agents

Medical Conditions

- Hypertension
- Diabetes
- Metabolic Syndrome
- Hyperprolactinemia
- Urinary incontinence

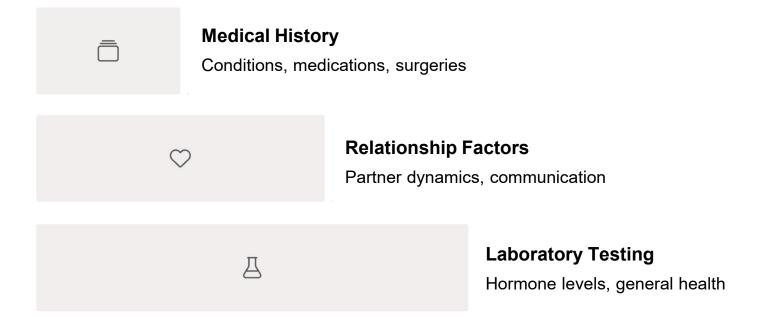
Psychological Factors

- Depression
- Anxiety
- Relationship issues
- Body image concerns
- Past trauma



Comprehensive Evaluation







International Society for the Study of Women's Sexual Health (ISSWSH) Process of Care for HSDD Management



Distinguish HSDD Subtypes

Identify generalized vs. situational and acquired vs. life-long HSDD

Identify Modifiable Factors

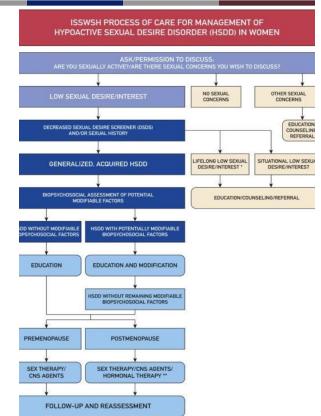
Recognize factors that can be addressed through intervention

Patient-Partner Education

Emphasize importance of education during all management phases

Goal-Oriented Approach

Use patient and partner preferences to guide treatment recommendations





Back to Sarah



Clinical Assessment

- Previously interested in sex (acquired)
 Current lack of interest causing distress
- Relationship impact reported
- No significant medical history
 No meds
- No other sexual function issues

DSDS: Yes to Q 1-4, No to Q5 Diagnosis:

Generalized, acquired HSDD based on symptom profile and DSDS results



(ChatGPT generated, 2025)



What is Normal?!?!



Desire for Desire

"Do you want to want sex?" Assess motivation to address low desire
 Personal Distress

 "Does it bother you?" Determine impact on well-being and relationships.

Change in Functioning

o "Is this a change from previously?" Identify acquired vs. lifelong patterns.

Situational Factors

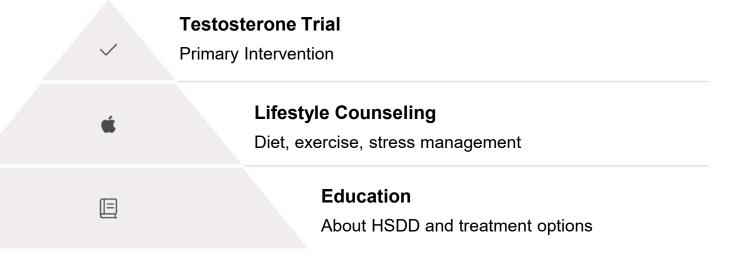
o "Is it only with your partner?" Distinguish between generalized and situational issues.

*When patients ask if their experience is "normal," focus assessment on personal distress and functional impact rather than arbitrary standards.



Management Plan







Hormonal Influences on Sexual Function



Hormones play a crucial role in regulating sexual function through complex interactions with neural pathways and receptors throughout the body



Age & Changes in Androgens



1 Young Adulthood

Peak androgen levels support optimal sexual function

2 Perimenopause

Gradual decline in androgens begins, affecting desire

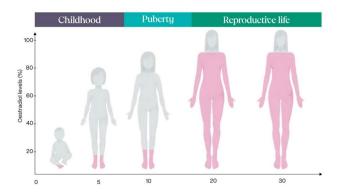
3 Menopause

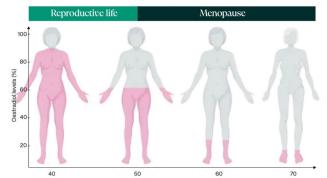
Significant drop in ovarian testosterone production

4 Rest of Life

Continued low levels from adrenal production only

Levels of oestradiol throughout your lifetime







Testosterone Physiology



Vascular

Enhances genital blood flow

Tissue

Maintains genital sensitivity

CNS Effects

Modulates desire pathways



Mood

Influences energy and well-being







Sex Steroid Hormones (Units Matter)





Hormone	Cis Female	Cis Male
Estradiol	3-40 ng/dL	1 ng/dL
Progesterone	<100-2000 ng/dL	<100 ng/dL
Testosterone	15-70 ng/dL	270-1070 ng/dL



Sex Steroid Hormones (Units Matter), continued



We Need to Stop Gendering Hormones: Ratios Matter!

5x

More Testosterone

Women have 5 times the amount testosterone than estradiol prior to perimenopause

Nuanced Care

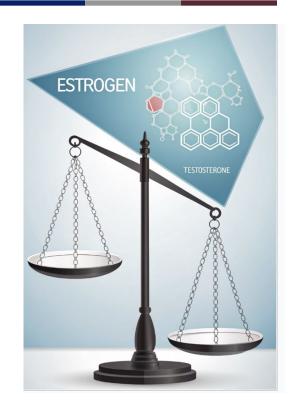
Hormone Balance

The ratio between hormones is critical for proper function

100%

Essential for All

All bodies need both estrogen and testosterone





So, What Does Testosterone Do?



Sexual Function

Enhances libido, arousal, and sexual satisfaction

Energy & Mood

Supports energy levels, motivation, and mood stability

Muscle & Bone

Maintains muscle mass and bone density

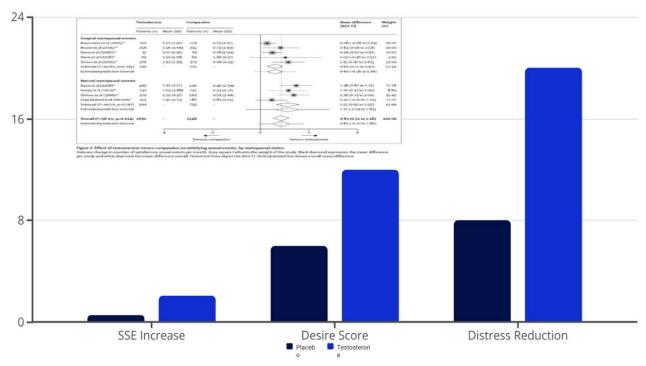
Cognitive Function

Influences memory, focus, and mental clarity



Testosterone Improves Sexually Satisfying Events & Reduces Distress





(Parish et al, 2020)



International Society for the Study of Women's Sexual Health Clinical Practice Guideline for the Use of Systemic Testosterone for Hypoactive Sexual Desire Disorder in Women



THE JOURNAL OF

SEXUAL MEDICINE

SOCIETY REPORT

International Society for the Study of Women's Sexual Health Clinical Practice Guideline for the Use of Systemic Testosterone for Hypoactive Sexual Desire Disorder in Women



Sharon J. Parish, MD, James A. Simon, MD, Susan R. Davis, MBBS, PhD, Annamaria Giraldi, MD, PhD, Irwin Goldstein, MD, Solve W. Goldstein, BA, CSE, Noel N. Kim, PhD, Sheryl A. Kingsberg, PhD, Abraham Morgentaler, MD, Rossella E. Nappi, MD, PhD, Kangsung Park, MD, PhD, Cynthia A. Stuenkel, MD, Abdulmaged M. Traish, PhD, and Linda Vignozzi, MD, Abdulmaged M. Traish, PhD, and Linda Vignozzi, MD, Abdulmaged M. Traish, PhD, Abdu

ABSTRACT

Background: The Global Consensus Position Statement on the Use of Testosterone Therapy for Women (Global Position Statement) recommended testosterone therapy for postmenopausal women with hypoactive sexual desire disorder (HSDD).

Aim: To provide a clinical practice guideline for the use of testosterone including identification of patients, laboratory testing, dosing, post-treatment monitoring, and follow-up care in women with HSDD.

Methods: The International Society for the Study of Women's Sexual Health appointed a multidisciplinary panel of experts who performed a literature review of original research, meta-analyses, review papers, and consensus guidelines regarding testosterone use in women. Consensus was reached using a modified Delphi method.

Outcomes: A clinically useful guideline following a biopsychosocial assessment and treatment approach for the safe and efficacious use of testosterone in women with HSDD was developed including measurement, indications, formulations, prescribing, dosing, monitoring, and follow-up.

Results: Although the Global Position Statement endorses testosterone therapy for only postmenopausal women, limited data also support the use in late reproductive age premenopausal women, consistent with the International Society for the Study of Women's Sexual Health Process of Care for the Management of HSDD. Systemic transdermal testosterone is recommended for women with HSDD not primarily related to modifiable factors or comorbidities such as relationship or mental health problems. Current available research supports a moderate therapeutic benefit. Safety data show no serious adverse events with physiologic testosterone use, but long-term safety has not been established. Before initiation of therapy, clinicians should provide an informed



Global Statement: Key Messages



Proper Dosing

Treatment should achieve blood concentrations approximating premenopausal physiological levels



Product Availability

No approved female product exists; male formulations can be used in female doses with monitoring



Against Compounding

Panel recommended against use of compounded testosterone (no pellets, no injectables)



Research Needed

Pressing need for more research and development of female-specific products



Testosterone Indications





(ChatGPT generated, 2025)

Primary Use

Post menopausal women with HSDD

Off-Label Status

No FDA approval despite evidence

Expected Benefits

Improved desire, arousal, satisfaction

Response Time

4-6 weeks for initial effects



What is Available for Women?





International Options

Limited availability of female-specific formulations globally



US Market Gap

No FDA-approved testosterone products specifically for women in the US



Unmet Need

Significant gap in treatment options for women with HSDD



Dosing & Expectations



Proper Dosing

- Order: Testim 1% gel 50mg/5mg. Use one tube daily #150gms/0RF (30 tubes/1box)
- Instruct: 1/10th to 1/15th of a male tube or packet/day. (One tube lasts 10 days)

Application Method

- Apply to back of calf, deltoid, inner/upper thigh or buttocks
- 1/10th of a male tube or packet/day

Efficacy Timeline

- 6-12 weeks up to 6 months
- If no benefit after 6 months, stop treatment

Labs

- Check baseline total testosterone (direct assay), lipids and hepatic panel
- Repeat total testosterone at 6 weeks then every 3 months x1 year, then annually
- Check lipids and hepatic panel every 3 months then annually

Monitor for SE

• Acne/hirsuitism (3-8%), hair loss, deepening of voice, clitoral enlargement



But Is It Safe?



Current Evidence

Short answer: the current data say YES in most cases

Long-term Data

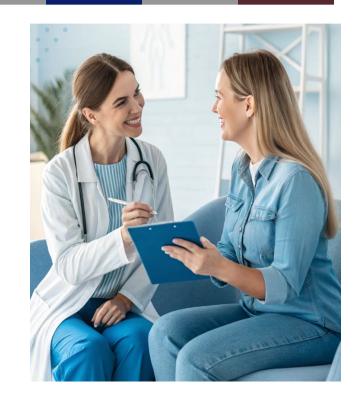
Need long-term safety data for complete assessment

Cardiovascular/Cancer Risk

No increased risk for cardiovascular issues or breast cancer (Agrawal 2024)

Side Effects

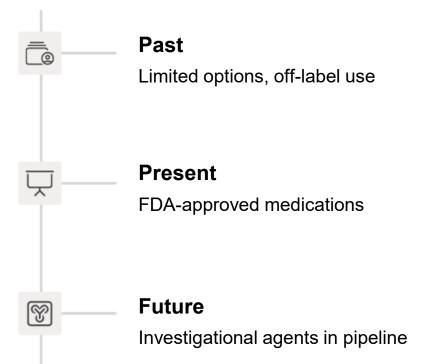
Androgenic side effects like acne and increased hair growth generally mild (Al-Imari 2012)





Non-Hormonal Treatments









Flibanserin





Flibanserin



Mechanism

Serotonin modulation

(5-HT1A agonist,

5-HT2A antagonist)





Dosing100mg nightly



Premenopausal

Indication

Women with HSDD



Phase 3 Clinical Trials



Study Population

Premenopausal women with acquired, generalized HSDD for >6 months 88.6% Caucasian, mean age 36 years (19-55 yrs)

Patient Characteristics

Mean duration of HSDD: ~ 5 years

Mean duration in monogramous relationship: 11 years

Trial Design

Study 1 (VIOLET): Flibanserin (N=280) vs Placebo (N=290)

Study 2 (DAISY): Flibanserin (N=365)

vs Placebo (N=372)

Study 3 (BEGONIA): Flibanserin (N=532) vs Placebo (N=536)

End Point	Mean Baseline	Improvement over Placebo*
Satisfying sexual events	2-3/mo	0.5-1.0/mo (median)
FSFI desire (range, 1.2-6.0)	1.8-1.9	0.3-0.4
Daily desire (range, 0-84)	10-12	1.7-2.3
Distress (range, 0-4)	3.2-3.4	0.3-0.4

* Improvement data represent least-square means, unless otherwise noted. The improvement in daily desire was not statistically significant. FSFI denotes Female Sexual Function Index. For the FSFI and daily desire scales, the higher the number, the greater the sexual desire. For the distress scale, the higher the number, the greater the distress.



Flibanserin Clinical Effects







Female Sexual Function Index scores increase



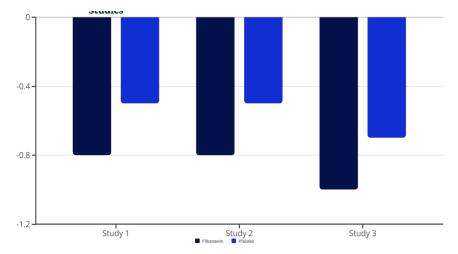
Decreases distress (FSDS-DAO)

Female Sexual Distress Scale scores decrease



FDA-approved for generalized HSDD

In premenopausal women, not caused by medical / psychiatric conditions or relationship problems





Bremelanotide



Delivery

On-demand subcutaneous injection

Mechanism (

Melanocortin agonist (MC4R)

Timing45 minutes before sexual activity

Frequency

Maximum once per 24 hours



(https://www.indiamart.com n.d.)

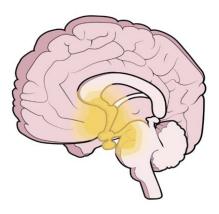


Bremelanotide, continued



ls a Melanocortin Receptor Agonist¹

Women with HSDD may have an imbalance of neurotransmitter activity in the brain that impacts sexual desire: too few excitatory signals, too many inhibitory signals, or both.²



Excitatory Signals

- + Dopamine
- + Norepinephrine
- + Oxytocin
- + Melanocortins (MCs)

Inhibitory Signals

- + Serotonin (5-HT)
- + Opioids
- + Endocannabinoids

[bremelanotide injection]
1.75 mg/0.3 mL for subcutaneous use only



Bremelantodie is a melanocortin receptor agonist

that nonselectively activates several receptor subtypes, the most relevant of which are MC1R and MC4R.^{1,2}

The exact mechanism by which Bremelanotide improves HSDD in women is unknown.¹

- 1. VYLEESI* (bremelanotide injection) Prescribing Information. 2019.
- 2. Kingsberg SA, et al. CNS Drugs. 2015;29(11):915-933.

Please see full Prescribing Information available at this presentation or at VyleesiPro.com.

Please see Important Safety Information on slides 11 and 12.



Summary of Study Results





Bremelanotide acts on the brain to reduce self-consciousness, increase attention to sexual imagery and sensitize women with HSDD to erotic stimuli.

+ The study demonstrated:



Bremelanotide increases sexual desire for up to **24-hours** post-administration (p=0.01)



2.5x as many women reported an increase in sexual desire when taking Bremelanotide (p=0.007)



Bremelanotide elicits significant effects on the brain response to erotic visual stimulation (p<0.05)



 Patients taking bremelanotide had significant decreases in food intake and increased feelings of satiety

Thurston, L. et. al. J Clin Invest. 2022:132(19)e152341.

Please see full Prescribing Information available at this presentation or at VyleesiPro.com. Please see Important Safety Information on slides 11 and 12.

42



Future Directions





Research

Novel mechanisms, biomarkers

Treatments

Targeted therapies, combination approaches

Technology

Digital therapeutics, telehealth

Education

Provider training, public awareness



Common Challenges



Medication Adherence

Side effects, regimen complexity

Unrealistic Expectations

Immediate results, complete resolution

Partner Dynamics

Mismatched expectations, communication barriers

Underlying Issues

Unaddressed psychological factors



Key Takeaways



1 FDA-Approved Options

Flibanserin and bremelanotide for premenopausal women

2 Testosterone

Evidence-based for postmenopausal HSDD

3 Safe Prescribing

Proper monitoring and follow-up essential

4 Comprehensive Care

Address biological and psychosocial domains





Learning Objectives



1. Describe premature ovarian insufficiency (POI), including its diagnostic criteria, initial workup, treatment and manage and the unique health risks someone with POI faces



Case Study #3



Meeting the menopausal transition at an earlier than expected age

A case study exploring workup and differences in management considerations when a patient experiences the final menstrual period prior to age 40



Patient Overview (Case Study #3)



Chloe

- 36-year-old Female
- Removed levonorgestrel intrauterine system (IUS) 3 years ago in attempt to conceive, had periods q60-90 days x 1.5 years, and now no periods at all for last 1.5 years, no positive pregnancy test
- Normal physical exam, BMI 23, no acne, no hirsutism
- On a prenatal vitamin and melatonin because she has had trouble sleeping
- Past Medical History: Psoriasis, currently well controlled with hydrocortisone
- Lab Results: Beta-hcg <1.2 mIU/mL, estradiol 17 pg/mL, follicle stimulating hormone 35 mIU/mL, thyroid and prolactin within normal (WNL)

On further questioning, patient reports she may be experiencing hot flash type symptoms and reports penetrative sexual intercourse has been uncomfortable unless lubricants are used. Reports her mother experienced menopause at age 48 and her older sister was able to conceive without issues in her midthirties



Premature Ovarian Insufficiency





SETTING

Arrange privacy, avoid interruptions, involve significant others if desired by patient and establish rapport



PERCEPTION

Assess patient's current understanding of their condition (use open questions)



INVITATION

Ask patient what and how much information they would like to know



KNOWLEDGE

- Provide warning of bad news: "I'm sorry I have to tell you..."
 Provide information
- in small pieces and avoid technical / scientific language
- Check comprehension as you proceed



EMPATHY

Identify, acknowledge, empathise and validate emotions as they arise



STRATEGY & SUMMARY

Summarize the main parts of the consultation, allow opportunity for questions and reinforce the plan of the next steps

Definition - Amenorrhea for 6 months or more prior to age 40, with biochemical confirmation of gonadotropins (FSH) higher than 25 mIU/mL with estradiol less than 50pg/mL.

Terminology - This is preferred terminology now over Primary Ovarian Failure **Early Menopause** - Menopause between ages of 40-44



Premature Ovarian Insufficiency (POI)



Additional workup is needed if menopause is experienced before the age of 40:

- Karyotype
- FMR1 mutation analysis
- Other genetic testing?
- Thyroid testing TSH
- 21-hydroxylase antibody testing
- Diabetes screening
- Thorough medical history



Back to Chloe



Karyotype - 46XX

FMR1 - 25 and 32 repeats

Thyroid and Adrenal antibody screening WNL

Non-diabetic



Next Steps and Considerations



- Genetic counseling
- Fertility counseling
- Risk management
- Contraception



Risk Management



Skeletal Health

- hormone therapy
- weight bearing exercise
- DEXA scan at diagnosis, with repeat DEXA every 3 years in women with low bone density

Cardiovascular Health

- hormone therapy
- exercise plan
- lipid panel at diagnosis
- annual monitoring of BP

Cognitive

hormone therapy

Mental Health

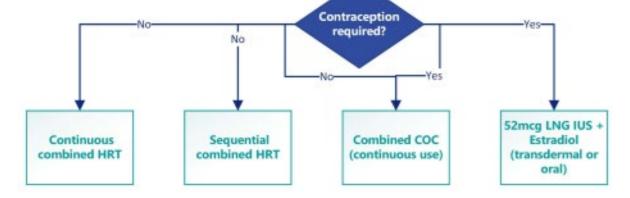
offer psychological counseling



Risk Management, continued



Overview of Hormone Regimens for women with POI include:

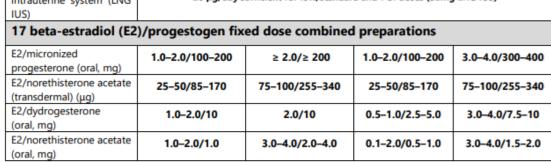


Until the age of normal menopause (ie, 51-ish)



HRT type	Sequential combined HRT		Continuous combined HRT	
Per 24 hours or day	Low/standard doses	'POI' doses	Low/standard doses	'POI' doses
Estradiol type				
Patch (transdermal, μg/24h	25–50	75–100	25-50	75–100
Gel sachet (transdermal, mg)	0.5–1.0	1.5-2.0	0.5–1.0	1.5-2.0
Gel pump (1 metered dose = 0.75 mg)	1-2	3–4	1-2	3–4
Spray (1.53mg per spray)	1-2	3-4	1-2	3-4
Oral (mg)	1.0-2.0	2.0-4.0	1.0-2.0	2.0-4.0
Progestogen				
Micronized progesterone (oral/per vagina, mg)	100–200	≥ 200 (e.g. 300– 400)	100	≥ 200
Dydrogesterone (oral, mg)	10	20	5.0	10
Medroxyprogesterone acetate (oral, mg)	5.0	10	2.5	5.0
Norethisterone acetate (oral, mg)	2.5-5.0	2.5–10	1.25-2.5*	2.5-5.0
Levonorgestrel intrauterine system (LNG IUS)	20 μg/day sufficient for low/standard and POI doses (52mg LNG IUS)			
17 beta-estradiol (E2)/progestogen fix	ed dose combined	d preparations	
E2/micronized progesterone (oral, mg)	1.0-2.0/100-200	≥ 2.0/≥ 200	1.0-2.0/100-200	3.0-4.0/300-400
E2/norethisterone acetate	25-50/85-170	75-100/255-340	25-50/85-170	75-100/255-340

(European Society of Human Reproduction and Embryology, 2024)







Key Takeaways



- If menopause happens before the age of 40, additional workup and treatment is needed
- Patients should be placed on physiologic doses of estrogen (and progesterone) until the normal age of menopause, then they can follow menopause hormone therapy guidelines



References (1 of 5)



- Al-Imari, L. & Wolfman, W. (2012). The safety of testosterone therapy in women. *J Obstet Gynaecol Can*, 34(9):859–865. https://doi.org/10.1016/S1701-2163(16)35385-3
- American College of Obstetricians and Gynecologists. (2014). Management of menopausal symptoms (Practice Bulletin No. 141). Obstetrics & Gynecology, 123(1), 202–216. https://doi.org/10.1097/01.AOG.0000441353.20693.78
- Bhupathiraju, S.N., & Manson, J.E. (2014). Menopausal Hormone Therapy and Chronic Disease Risk in the Women's Health Initiative:

 Is Timing Everything?. Endocrine practice: official journal of the American College of Endocrinology and the American

 Association of Clinical Endocrinologists, 20(11), 1201–1213. https://doi.org/10.4158/EP14205.RA
- Carpenter, J.S., Cortés, Y.I., & et al. (2022). Palpitations across the menopause transition in SWAN: Trajectories, characteristics, and associations with subclinical cardiovascular disease. *Menopause*, 30(1), 18–27. https://doi.org/10.1097/GME.0000000000002082
- Clayton A.H., Goldfischer, E.R., Goldstein, I., Derogatis, L., Lewis-D'Agostino, D.J., Pyke, R. (2009). Validation of the decreased sexual desire screener (DSDS): a brief diagnostic instrument for generalized acquired female hypoactive sexual desire disorder (HSDD). *J Sex Med*, 6(3):730-738. https://doi.org/10.1111/j.1743-6109.2008.01153.x



References (2 of 5)



- Clayton, A. H., Goldstein, I., Kim, N. N., Althof, S. E., Faubion, S. S., Faught, B. M., Parish, S. J., Simon, J. A., Vignozzi, L., Christiansen, K., Davis, S. R., Freedman, M. A., Kingsberg, S. A., Kirana, P. S., Larkin, L., McCabe, M., & Sadovsky, R. (2018). The International Society for the Study of Women's Sexual Health Process of Care for Management of Hypoactive Sexual Desire Disorder in Women. *Mayo Clinic proceedings*, 93(4), 467–487. https://doi.org/10.1016/j.mayocp.2017.11.002
- Davis, S.R., Baber, R., Panay, N., Bitzer, J., Perez, S.C., Islam, R.M., Kaunitz, A.M., Kingsberg, S.A., Lambrinoudaki, I., Liu, J., Parish, S.J., Pinkerton, J., Rymer, J., Simon, J.A., Vignozzi, L., & Wierman, M.E. (2019). Global consensus position statement on the use of testosterone therapy for women.

 The Journal of Clinical Endocrinology & Metabolism, 104(10), 4660–4666. https://doi.org/10.1210/jc.2019-01603
- El Khoudary, S.R., Chen, X., Nasr, A.N., Billheimer, J., Brooks, M.M., McConnell, D., Orchard, T.J., Crawford, S.L., Matthews, K.A., Rader, D.J. (2021).

 HDL Subclasses, Lipid Content, and Function Trajectories Across the Menopause Transition: SWAN-HDL Study. *Arteriosclerosis Thrombosis and Vascular Biology;* 41(2): 951-961. https://doi.org/10.1161/ATVBAHA.120.315355 Epub 2020 Dec 3. Erratum in: Arteriosclerosis Thrombosis and Vascular Biology. 2021 May 5;41(5):e283. https://doi.org/10.1161/ATV.000000000000000142. PMID: 33267661; PMCID: PMC8105263.
- European Society of Human Reproduction and Embryology. (2024). *Premature Ovarian Insufficiency*. https://www.eshre.eu/Guidelines-and-Legal/Guidelines/Premature-ovarian-insufficiency
- Gold, E.B., Colvin, A., Avis, N., Bromberger, J., Greendale, G.A., Powell, L., Sternfeld, B., Matthews, K. (2006). Longitudinal analysis of the association between vasomotor symptoms and race/ethnicity across the menopausal transition: study of women's health across the nation. *Am J Public Health*: 96(7):1226-35. https://doi.org/10.2105/AJPH.2005.066936.
- Harman, S.M., Brinton, E.A., Cedars, M., Lobo, R., Manson, J.E., Merriam, G.R., Miller, V.M., Naftolin, F., Santoro, N. (2005). KEEPS: The Kronos Early Estrogen Prevention Study. *Climacteric*, 8(1):3-12. http://doi.org/10.1080/13697130500042417



References (3 of 5)



- Jackson, E. A., El Khoudary, S.R., Crawford, S.L., Matthews, K., Joffe, H., Chae, C., & Thurston, R.C. (2016). Hot Flash Frequency and Blood Pressure: Data from the Study of Women's Health Across the Nation. *Journal of women's health* (2002), 25(12), 1204–1209. https://doi.org/10.1089/jwh.2015.5670
- Joffe, H.V., Chang, C., Sewell, C., et al. (2016). FDA approval of flibanserin—treating hypoactive sexual desire disorder. *N Engl J Med*, 374(2):101–104. https://doi.org/10.1056/NEJMp1513686.
- Kingsberg, S.A., Clayton, A.H., Pfaus, J.G. (2015). The female sexual response: current models, neurobiological underpinnings and agents currently approved or under investigation for the treatment of hypoactive sexual desire disorder. *CNS Drugs*, 29(11):915–933.
- Matthews, K.A., Crawford, S.L., Chae, C.U., Everson-Rose, S.A., Sowers, M.F., Sternfeld, B., Sutton-Tyrrell, K. (2009). Are changes in cardiovascular disease risk factors in midlife women due to chronological aging or to the menopausal transition? *J Am Coll Cardiol*, 54(25):2366-73. https://doi.org/10.1016/j.jacc.2009.10.009
- Parish, S.J., Simon, J.A., Davis, S.R., Giraldi, A., Goldstein, I., Goldstein, S.W., Kim, N.N., Kingsberg, S.A., Morgentaler, A., Nappi, R.E., Park, K., Stuenkel, C.A., Traish, A.M., Vignozzi, L. (2021). International Society for the Study of Women's Sexual Health. International Society for the Study of Women's Sexual Health Clinical Practice Guideline for the Use of Systemic Testosterone for Hypoactive Sexual Desire Disorder in Women. *J Sex Med*, 18(5):849–867. https://doi.org/10.1016/j.jsxm.2020.10.009



References (4 of 5)



- Samargandy S, Matthews KA, Brooks MM, Barinas-Mitchell E, Magnani JW, Janssen I, Hollenberg SM, El Khoudary SR. Arterial Stiffness Accelerates Within 1 Year of the Final Menstrual Period: The SWAN Heart Study. *Arterioscler Thromb Vasc Biol*. 2020 Apr;40(4):1001-1008. https://doi.org/10.1161/ATVBAHA.119.313622
- The North American Menopause Society. (2022). The 2022 hormone therapy position statement of The North American Menopause Society. *Menopause*, 29(7), 767–794. https://doi.org/10.1097/GME.00000000000002028
- The Menopause Society. (2022). Menopause practice: A clinician's guide (7th ed.). Mayfield Publishing.
- The North American Menopause Society. (2022). The 2022 hormone therapy position statement of The North American Menopause Society. *Menopause*, 29(7), 767–794. https://doi.org/10.1097/GME.00000000000002028
- Thurston, R.C., Aslanidou Vlachos, H.E., Derby, C.A., Jackson, E.A., Brooks, M.M., Matthews, K.A., Harlow, S., Joffe, H., El Khoudary, S.R. (2021). Menopausal Vasomotor Symptoms and Risk of Incident Cardiovascular Disease Events in SWAN. *J Am Heart Assoc*, 10(3):e017416. https://doi.org/10.1161/JAHA.120.017416



References (5 of 5)



- Thurston, R.C., Chang, Y., Kline, C.E., Swanson, L.M., El Khoudary, S.R., Jackson, E.A., Derby, C.A. (2024). Trajectories of Sleep Over Midlife and Incident Cardiovascular Disease Events in the Study of Women's Health Across the Nation. *Circulation*, 149(7):545-555. http://doi.org/10.1161/CIRCULATIONAHA.123.066491
- Thurston RC, Chang Y, Kline CE, Swanson LM, El Khoudary SR, Jackson EA, Derby CA. Trajectories of Sleep Over Midlife and Incident Cardiovascular Disease Events in the Study of Women's Health Across the Nation. Circulation. 2024 Feb 13;149(7):545-555. https://doi.org/10.1161/CIRCULATIONAHA.123.066491
- Thurston, L., Hunjan, T., Mills, E.G., et al. (2022). Melanocortin 4 receptor agonism enhances sexual brain processing in women with hypoactive sexual desire disorder. *J Clin Invest.*, 132(19):e152341. http://doi.org/10.1172/JCI152341
- Thurston, R.C., Joffe, H. (2011). Vasomotor symptoms and menopause: findings from the Study of Women's Health across the Nation. *Obstet Gynecol Clin North Am.*, 38(3):489-501. http://doi.org/10.1016/j.ogc.2011.05.006





Questions?



How to Obtain CE/CME Credit



Special Feature Webinar: Hormone Therapy Unlocked: Case Studies in Diagnosing and Managing Hypoactive Sexual Desire Disorder and Menopausal Hormone Therapy

To claim CE/CME credit for this activity, complete the evaluation survey and posttest before the evaluation period ends on **Wednesday**, **August 27**, **2025**, **at 11:59 p.m. Eastern Time**.

Log in and complete the requirements:

https://www.dhaj7-cepo.com/user/login?destination=node/46848/takecourse.

For more information about the event, please visit the registration page.

Once you have been awarded credit, you can download your certificate anytime through <u>your account</u>. Any activity you register for but have yet to complete will be available under your <u>pending activities</u> until the evaluation period ends.

Questions? Email the DHA J-7 Continuing Education Program Office at dha.ncr.j7.mbx.cepo-cms-support@health.mil.



Hormone Therapy Unlocked Series



Home Study

Part 1: Hormone Therapy Unlocked: Overcoming Barriers to Better Care

1.50 CE/CME credits

Part 2: Hormone Therapy
Unlocked: Case Studies in
Diagnosing and Managing
Hypoactive Sexual Desire Disorder
and Menopausal Hormone Therapy
1.50 CE/CME credits

Course opens on 28 August 2025



Presenters:

- Air Force Lt. Col Samantha Simpson, M.D.
- Retired Air Force Col. Christine Hart Kress, DNP, APRN, WHNP-BC, MSCP
- Rebbecca Hertel, DO, MSCP
- Aoife O'Sullivan, M.D., NCMP
- Heather Quaile, DNP, WHNP-BC, AFN-C, CSC, I.F., FAANP

Earn up to 3.00 CE/CME credits!

Email us for more information:

dha.ncr.j7.mbx.continuing-educationoffice@health.mil



September 2025 Clinical Communities Speaker Series (CCSS)



Healthcare Innovation and Readiness: Empowering Change and Resilience in Global Care Delivery



September 25, 2025 7:45 a.m. – 4:15 p.m. (ET)



Earn up to 6.5 CE/CME credits!



- Explore the **evidence-based practices in medicine** through educational content created by military and civilian subject matter experts specializing in ethics, research, healthcare, and academia
- ➤ This CE opportunity will advance the practice, skills, and competence of healthcare providers across the Military Health System
- ➤ Each session is designed to refine the quality of care, achieve the best outcomes, and improve population health



For more information, please reach out to: dha.ncr.j7.mbx.continuing-education-office@health.mil