



Oral Case Presentation

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Seminar and Practicum

Opening Remarks

Chief Complaint

- 51 year old female patient presents to Core Wellness Functional Medicine Clinic for management of hormone replacement therapy
- She was started on estradiol patches from her OB 8 weeks post total hysterectomy
- GOAL of this patient/presentation: class to be exposed to hormone replacement therapy (HRT) in a patient



HPI



- Established pt presents herself to clinic for follow up. Pt reports she started the estradiol patch and hasn't had any hot flashes. She is extremely happy with results, if she misses or is late putting the patch she will start to feel hot flushes again. Desires to continue HRT but worries about family history of breast cancer. She has done Myriad Genetic Testing for the BRCA1 and BRCA2 gene which came back negative. Diagnostic mammogram is scheduled for April, 2025. Pt complains of "zero libido". She desires to restart the testosterone which she has tolerated in the past. Patient denies problems with sleep, sleeps 8hrs per night.
- She didn't have labs drawn r/t thyroid and starting the estradiol. She denies any hyper or hypothyroid symptoms.
- She reports she restarted the semaglutide and did it for two months. She lost 5 lbs and stopped. She wants to lose another 10 lbs but desires to do it more naturally. She exercises 3-4 times a week, 60 + minutes.

Part of the History

Pertinent Family History	Grandmother- history of malignant neoplasm of the breast
	Aunt- history of malignant neoplasm of the ovary
	Aunt- history of malignant neoplasm of the breast
	Sister- history of malignant neoplasm of the ovary
Pertinent Surgical history	Patient is post total hysterectomy fall of 2024
Genetic testing	Myraid Genetic Testing for BRCA1 and BRCA2: negative
Health Maintenance:	Mammogram: diagnostic f/u for BIRADS 0 (hx of biopsy)
	Pap: not indicated
	Colon screening: Cologuard 8/22
	Dexa Scan: not had one

Pertinent Past Medical History:
Hypothyroidism

ROS: Unremarkable

Current Medications:

- Levothyroxine 88mcg daily
- Leothyronine 5mcg daily
- Estradiol 0.0375 twice weekly

Allergies: NKDA



Physical Exam

GENERAL: normal body habitus. No distress.

Neck: Supple. No neck masses. Thyroid is normal to palpation.

Cardiovascular: S1 S2 without murmur, rub, or gallop.

Psychiatric: Normal mood and affect. Oriented.



Diagnosis/ Differentials

- N95.9 Menopausal Disorder
- R68.82 Decrease libido
- E03.9 Hypothyroidism
- Z79.899 Medication Management
- E66.3 overweight
- R92.8 Abnormal mammogram





Important to understand

- The North American Menopause Society (NAMS) recommends that HRT should be individualized, with continued evaluation and decision making around the continuation of therapy (NAMS, 2022).
 - Estrogen patches are used more often than oral to bypass the liver and decrease risk for blood clots.
 - Progesterone is often administered with estrogen as it is uterine protective (in this case she doesn't have a uterus).
 - HRT in hormone therapy use does not increase relative risk of breast cancer
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Management



- Continue levothyroxine for hypothyroidism. Check TSH r/t possible effects estradiol can have on thyroid levels (pt never got labs done after initiation of estrogen patches). DIM supplement: 100 mg to prevent the aromatization of testosterone to estrogen
- Labs: TSH, Testosterone F/T, Estradiol. Annual Labs in July.
- Mutually agreed to restart Testosterone therapy. Pt has been on the testosterone in the past and found it helpful for libido, but didn't notice much changes in fatigue. She is aware of the possible side effects of this hormone including unwanted hair, hair loss, acne, and oily scalp. She will monitor accordingly.
- Continue Estradiol Patch bi weekly to help with vasomotor symptoms of menopause. Symptoms of overtreatment include breast tenderness, bloating, mood swings/irritability.
- Educated on Osteoporosis, post menopause, and encouraged Vit D, K, and Calcium intake daily. Discussed getting a baseline Dexa Scan within the next year.

Diagnostic Results

- Total Testosterone: 17.8ng/dL
- Free Testosterone: 3.0pg/mL
- TSH: 0.282 uIU/mL
- Estradiol: 47/8pg/mL



Summary:

- HRT includes estrogen, progesterone, and testosterone replacement
- NAMS is supportive of estrogen and progesterone and FDA approved bio-identical HRT, this excludes compounded therapies
- HRT impacts thyroid function so it is very important to monitor this with changes in HRT
- HRT improves bone and cardiovascular health having a impact throughout a woman's life.



References:

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