

POST HYSTERECTOMY WITHOUT OOPHORECTOMY

CASE 4 PRESENTATION:

42 year old female pre-menopausal woman without menstrual cycles
Hysterectomy due to uterine fibroids 1 year ago; ovaries intact, no HRT

KEY SYMPTOMS:

- Hot flashes
- Cold hands and feet
- Depression
- Severe morning fatigue
- Allergies (getting worse)
- Decrease libido

HORMONE TEST	IN RANGE	OUT OF RANGE	UNITS	RANGE
E2 (Estradiol)		<0.5 L	pg/ml	1.0-1.5
Pg (Progesterone)		<15 L	pg/ml	25-100
Pg/E2 Ratio		30 L		50-100
Testosterone		10 L	pg/ml	20-50
DHEA-s	4.5		ng/ml	3-10
AM Cortisol	3.0		ng/ml	3-8
PM Cortisol		0.3 L	ng/ml	.5-1.5

ANALYSIS:

- Low estradiol, progesterone and testosterone suggest suboptimal ovarian function, a common occurrence after hysterectomy (without oophorectomy) due to surgical trauma and/or ovarian blood flow disruption.
- Progesterone in a hysterectomized woman is also important to keep estrogen and thyroid balanced avoiding the development of E2 dominance symptoms.
- Estrogen deficiency symptoms can include vaginal dryness, memory lapses, vasomotor symptoms and incontinence.
- Low bio-available testosterone may be associated with decreased sex drive, depressed mood, decreased enjoyment of life and vaginal dryness. In a recent study by Orozco, salivary testosterone also correlated to bone density (Orozco P et al. Eur J Epidemiol 2000;16-907-912.)
- Fatigue and worsening allergies is consistent with failure to elevate morning cortisol.

- Impaired adrenal function is common after stressors such as surgery.
- Cortisol is necessary for proper action of thyroid hormones and low cortisol can present with symptoms of hypothyroidism despite normal thyroid tests.

CLINICAL PEARLS:

Ovaries were not removed; however test results and symptoms suggest post menopausal status. Low adrenal levels often exacerbate sex hormone deficiency symptoms. DHEA is a precursor to sex hormones i.e. testosterone and estradiol.

TREATMENT CONSIDERATIONS:

- Bio-identical estradiol and progesterone (BHRT)
- Testosterone replacement.
- Addressing Adrenal function is vital in this case: Vitamins B5, B6, and C support adrenal function. Recommend obtaining a diurnal cortisol (4X a day collection) to assess full adrenal function.
- Herbal adaptogens will improve adrenal hormone production: Licorice root, Siberian Ginseng, Rhodiola, and Ashwagandha can be used.
- Lifestyle changes: promote good sleep habits, reduce stressors, and learn relaxation techniques such as meditation/deep breathing exercise.
- Improve nutrition by eliminating simple carbohydrates. Add whole grain foods that will support adrenal and immune function.
- Obtain a baseline bone density evaluating current bone health status.
- Retesting in 3 months is indicated if symptoms are not resolving; dose adjustments can be made on the steroid hormones.