



Report Number:
99ABCD

Provider:
Labrix Clinical Services, Inc
16255 SE 130th Ave
Clackamas, OR 97015
Ordering Provider:

Patient Info:
Jane Sample

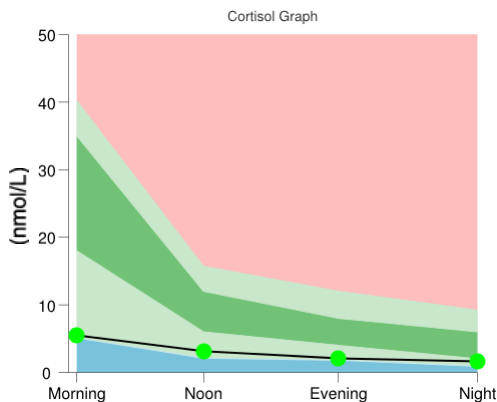
Age:52 Gender:F

Menopausal Status:
Hysterectomy (Ovaries Not Removed)

9876 SW Balanced St
Billings, MO 64515

Sample Collection	Date/Time
Morning	02/25/2012 0730
Noon	02/25/2012 1130
Evening	02/25/2012 1500
Night	02/25/2012 1940
Neurotransmitter	02/25/2012 0735
Wake Up Time	0700
Samples Arrived	02/25/2012
Results Reported	07/11/2012

	Saliva Hormone Test	Result	Units	L	WR	H	Reference Range
HORMONES	Estrone (E1)	9.31	pg/ml		◆		5.8-34.2 post menopausal
	Estradiol (E2)	4.54	pg/ml			▲	1.0-3.2 post menopausal
	Estriol (E3)	5.68	pg/ml		◆		<30.0 female, non-pregnant
	EQ (E3 / (E1 + E2))	0.41		▼			low <1.0; WR >1.0; optimal >1.5
	Progesterone (Pg)	2182.37	pg/ml		◆		500-3000 supplementation
	Ratio of Pg/E2	480.70			◆		200-600 post menopausal (Pg supplementation)**
	Testosterone	65.01	pg/ml			▲	6.1-49.0 female
	ADRENALS	DHEA	23.36	pg/ml	▼		
Cortisol Morning		5.48	nmol/L		◆		5.1-40.2; optimal range: 18-35*
Cortisol Noon		3.14	nmol/L		◆		2.1-15.7; optimal range: 6-12*
Cortisol Evening		2.08	nmol/L		◆		1.8-12; optimal range: 4-8*
Cortisol Night		1.63	nmol/L		◆		0.9-9.2; optimal range: 2-6*



Hormone Interpretations:

- A component of the estradiol level may be due to aromatization of testosterone by adipose tissue and/or conversion from DHEA. Estrone and estriol are within the reference ranges, however the Estrogen Quotient (EQ) is low. Estriol is less potent than the other estrogens and when present in sufficient quantities (as indicated by an optimal EQ) it plays an antagonistic role, and may govern the proliferative effects of estrone and estradiol. Estriol supplementation is a consideration to balance this quotient and reduce associated risks.
- Progesterone and estradiol appear well balanced with current supplementation regimen.
- The high testosterone is suggestive of metabolic syndrome (insulin resistance), although exogenous exposure (not reported) cannot be excluded. Serum vitamin D, fasting glucose and insulin testing may be warranted.
- While DHEA levels are expected to decline with age (adrenopause), the DHEA level measured here is below the normal age related DHEA decline one would expect. Note: Supplementation with DHEA may increase testosterone and/or estradiol levels.
- The suboptimal diurnal cortisol pattern and reported symptoms are consistent with established (Phase 3) adrenal gland fatigue (hypoadrenia).

Notes:

L=Low(below range) WR=Within Range (within range) H=High (above range)

DHEA, Testosterone and Estriol results are for investigational use only.

*Apply only when all four cortisols are measured. Clinical interpretations may override these generalized optimal ref. ranges.

**The Pg/E2 ratio is an optimal range established based on clinical observation. Progesterone supplementation is generally required to achieve this level in men and postmenopausal women.

Adrenal Phase: 3



Jay H. Mead MD

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Labrix Clinical Services, Inc
Medical Director



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NEUROTRANSMITTERS	Neurotransmitter Test	Result	Units	Reference Range				
				L	WR	H		
	Serotonin	23.37	µg/gCr				32.5 - 113.9	INHIBITORY
	Gaba	0.01	µMol/gCr				0.39 - 5.0	
	Dopamine	103.37	µg/gCr				83.2 - 277.7	EXCITATORY
	Epinephrine	18.30	µg/gCr				0.68 - 11.9	
	Norepinephrine	85.49	µg/gCr				7.5 - 59.1	
	Glutamate	70.81	µMol/gCr				11.6 - 77.3	
	N/E Ratio	4.67					<10.0	
	Creatinine	102.58	mg/dL					
	Specific Gravity	1.01					1.001 - 1.035	

NT Neurotransmitter Interpretations:

- Decreased levels of serotonin may contribute to anxiety/depression and a sense of discontentment. Diminished serotonin may also can be a factor implicated in poor sleep quality and subsequent fatigue and are commonly associated with PMS symptoms along with decreased sense of well-being, muscle and body aches, and over-all lassitude.
- Low GABA levels are associated with anxiety, worry and diminished peacefulness and can contribute to poor impulse control and decreased sleep quality.
- Increased noriepinephrine (NE) and epinephrine (E) contributes to symptoms of anxiety, agitation and irritability. High NE and E is directly connected to the "fight or flight" response including rapid heart rate, restlessness, cold hands, racing thoughts, insomnia and inability to relax.
- General treatment considerations include use of 5 HTP, l-theanine, GABA, calming herbs such as: valerian, passion flower and lemon balm, along with generalized support of the adrenals with botanicals such as ashwaghandha, along with regular use of B complex vitamins.

NT H NeuroEndocrine Connection:

- A common compensation for lower cortisol production (from adrenal cortex) is increased NE and E (from adrenal medulla). Cortisol steal (pregnenolone) may result in diminished progesterone levels.

Notes:

*Creatinine is used to calculate results and is not intended to be used for diagnosis only

Jay H. Mead MD FASCP
Labrix Clinical Services, Inc
Medical Director