Dr.EDWARD CHAN

Sex: M

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ENDOCRINOLOGY SALIVA

Range

SALIVA

DHEAS Profile, Waking+30min

Result

Units

S Profile, Waking+30min 1.0 *L 5.0 - 30.0

nmol/L

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Adrenocortex Stress Comments

CORTISOL AWAKENING RESPONSE:

The cortisol awakening response (CAR) test is a transient, immediate rise in cortisol upon awakening and is distinct from the diurnal rhythm. In a normal individual without significant stressors, cortisol is highest in the morning shortly after awakening, rises by up to 60% roughly 30 minutes after awakening, then steadily drops throughout the day, reaching the lowest level during sleep in the very early morning about 2 am. A loss of the expected curve with its characteristic morning peak and steady decline towards evening may suggest HPA axis dysfunction.

CAR RISE RESPONSE IS LOW:

The rise in Cortisol from waking to 30 minutes post-waking is low. This indicates possible adrenal insufficiency/exhaustion.

CAR DECLINE RESPONSE WITHIN NORMAL RANGE:

The decline in Cortisol from waking to 60 minutes post-waking is within normal range. This is consistent with normal Cortisol production/metabolism.

ELEVATED MIDDAY CORTISOL LEVEL:

Is this due to supplementation, adrenal stress, inflammation, medication or fasting? Suggestive of blood sugar imbalance.

ELEVATED LATE AFTERNOON CORTISOL LEVEL

Is this due to supplementation, adrenal stress, inflammation, medication or fasting? Suggestive of blood sugar imbalance.

ELEVATED EVENING CORTISOL LEVEL:

Saliva evening cortisol level is high, suggestive of Hypoglycaemia and imbalance HPAA suggesting maladaption.

Androstenedione	0.77 0.70 - 5.20	nmol/L	•
Testosterone.	1.92 *L 110.0 - 420.	0 pmol/L	• Interest
Estradiol (E2)	11.7*H 2.7 - 11.0	pmol/L	Marie Control
Estrone (E1)	38.3 7.7 - 50.0	pmol/L	•
Androstenedione/E1 Ratio	0.02 *L 0.05 - 1.10	RATIO	Marie Carlos Car

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Saliva Hormone Comments

** PLEASE NOTE NEW REFERENCE RANGES AS OF 20.08.2021 **

TABLE 1: SALIVARY HORMONE REFERENCE RANGES: (NOT ON HRT - BASELINE)

FEMALE Progesterone	DHI	EAS	E2	I	E1	I	E3
Pre/menarcheal 90-390 Follicular 90-480 Mid-Cycle 85-590 Luteal 276-1725 Post Menop. 80-820 Premenopausal, No OC's	 1.8	 -18.5	3.1-13 3.1-17 5.0-22 3.7-18 3.7-16		9.5-71 9.5-71 9.5-71 9.5-71 9.0-65	 	7.7-49 7.7-49 7.7-49 7.7-49 9.0-62
Premenopausal, with OC's	1 2.0	-8.0 j		i 		i 	
MALE <230	5.0	-32.0	2.7-11	1	7.7-50	I	6.6-38

| TABLE 2: TARGET REFERENCE RANGES: (ON HRT - 24 to 48 hr post last dose)

	Pro	gesterone	Te	stosterone	ı	E2	 	E1		E3
 Oral	32	0-1998	I		ı	7-73	1		1	69-139
Patch	1	-	1		1	4-18	1	-	- 1	-
Cream/Gel	318	0-15000	F:	277-867	1	37-184	1	-	-	1040-1734
I	1		M:	347-1734	1		1		- 1	

SALIVA E1 level is within range for a male, indicating minimal aromatisation of androgens to E1.

ELEVATED E2 LEVEL:

Saliva E2 level is elevated for a male and suggestive of aromatisation of androgens to estrogens. Suggest using 5% transdermal Chrysin and / or 50mg Zinc.

SALIVA FREE TESTOSTERONE level is adequate and within range.

Tests ordered: CAR,E1-SAL,E2-SAL,TES-SAL,Andro-SAL,Andst/E1