

Pain Management

Frequently Asked Questions

Does pain impact the endocrine system?

Yes - acute pain enacts the endocrine system while chronic pain suppresses it over time. Both situations can render pain management ineffective. By clinical monitoring of hormones, the effects of chronic pain and the effects of therapy can be better tailored to provide optimal care.

When a patient complains of the following: fatigue/lethargy, libido changes, and decreased effectiveness of medications – Hormone Replacement Therapy (HRT) may be indicated. Clinical symptoms such as depression, insomnia, hyperalgesia, allodynia, and opioid tolerance are often only a piece of the puzzle when treating a patient's pain.

Standard options for HRT

- Initial DHEA or Pregnenolone
- Secondary
 - Men; Hydrocortisone, Testosterone
 - ▶ Women; Hydrocortisone, Testosterone, Estradiol
- Tertiary If your efforts to normalize endocrine levels has proven unsuccessful, it may be necessary to refer a patient to a Hormone Replacement Clinic/ Endocrinologist.

How often do I test my patients?

- · Initial for baseline value.
- Upon patient complaint or new symptoms.
- Re-checking abnormal results.
- Upon medication change.
- Periodically with long term pain management patients.

Some Symptoms of Low Serum Hormone Levels		
 Weakness 	 Hyperalgesia 	
 Fatigue 	 Impaired Analgesia 	
 Lethargy 	 Impaired Mentation 	
 Depression 	 Anorexia 	
 Decreased Libido 		

If you have any additional questions please email us at info@hdxnow.com or contact your Sales Representative.







Laboratory and Offices 8465 Merchants Way | Suite 206 Orange Park, FL 32222

T 904.588.2164 **F** 770.206.2366



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Which hormones can be affected by pain management?

- DHEA-S
- Estradiol
- DHEA
- DHT
- Cortisol
- Vitamin D3
- Cortisone
- Estrone
- Testosterone

Hormones for Serum Levels Testing And Replacement		
Hormone/Laboratory Test	Reference (normal) Range	Starting Replacement Dosage
Cortisol	4-22 mcg/dL	Hydrocortisone 5-10mg, BID*
DHEA	Female: 23-266 mcg/dL Male: 70-495 mcg/dL	25-50 mg, BID
Estradiol	Female: Premenopausal - 19-57 pg/mL Postmenopausal - <31 pg/mL Male: <39 pg/mL	0.5-1.0 mg/d
Pregnenolone	Female: Premenopausal - 7-88 ng/dL Postmenopausal - 15-111 ng/dL Male: 13-208 ng/dL	25-50 mg, BID
Progesterone	Female: Premenopausal - 1.0-21.3 ng/mL Postmenopausal - <0.5 ng/mL Male: <1.4 ng/mL	25-50 mg/d
Testosterone	Female: 2-45 ng/dL Male: 250-827 ng/dL	Females: use about 1/4 dose for males Males: Use a commercial testosterone replacement therapy and follow label.

Source: Quest Diagnostics

Hydrocortisone converts cortisol, therefore, hydrocortisone is the most commonly used preparation to replace low levels.

BID, twice daily

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