HORMONE THERAPY FOR PAIN MANAGEMENT

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By Forest Tennant M.D., Dr. P.H.

DISCLOSURES

FINANCIAL
a. Speaker/Consultant to Regenesis Biomedical
b. Editor-In-Chief, Practical Pain Management

THIS PRESENTATION
May contain references to off-label and compounded use of drugs.

OBJECTIVES
1. Determine the value of hormone testing.
2. Know the difference between replacement and replenishment of hormones.
3. Know the physiologic functions of neurohormones.
4. Understand the unique characteristics of oxytocin compared to other hormones.
5. Which corticosteroids suppress neuroinflammation?
Hormone testing and treatment are now vital to management and treatment of severe chronic pain.

Each practitioner should select their “best fit”.

WHY ESSENTIAL?

✓ MARKER OF UNCONTROLLED PAIN
✓ MARKER FOR NEED OF REPLENISHMENT
✓ ANDROGENIC/NEUROGENIC GROWTH
✓ DIRECT PAIN RELIEF (OXYTOCIN)

FUNCTION OF HORMONES

- Mental Acuity
- Receptor Enhancement
- Anti-Inflammatory
- Androgenic-Neurogenic
- Maintenance of Blood-Brain Barrier
- Energy/Motivation/Strength
- Direct Pain Relief (Oxytocin)
- Microglial/Neuroinflammation Suppression

FUNCTION OF HORMONES


NEUROHORMONES PRODUCED AND UTILIZED INSIDE THE CNS

- **ESTRADIOL**
- **DHEA**
- **PREGNENOLONE**
- **PROGESTERONE**

Neuroprotection, Neuroregeneration, Suppression of Neuroinflammation


HORMONE TESTING

- MARKERS OF UNCONTROLLED PAIN
- MARKERS FOR NEED OF REPLENISHMENT (NOT REPLACEMENT)

MARKERS OF UNCONTROLLED PAIN

• ADRENOCORTICOTROPIN (ACTH)
• CORTISOL
• PROLACTIN
• EPIDERMAL GROWTH FACTOR


MAY SHOW SERUM DEFICIENCY IF SEVERE PAIN IS UNCONTROLLED FOR TOO LONG.

MARKERS INDICATING NEED FOR REPLENISHMENT

• CORTISOL
• DEHYDROEPYRANDROSTERONE (DHEA)
• ESTRADIOL
• PREGNENOLONE
• PROGESTERONE
• TESTOSTERONE

REPLENISHMENT IS DONE BY INTERMITTENT LOW DOSAGES.

SPECIAL SITUATIONS

✓ ADRENAL SUPPORT - CORTICOCIDS
✓ NMDA ANTAGONIST - PREGNENOLONE
✓ FLARE TREATMENT - OXYTOCIN
✓ TISSUE REGENERATION – HCG, HGH
✓ TOPICAL FOR TISSUE REGENERATION – ESTRADIOL, MEDROXYPROGESTERONE


CORTICOSTEROID ADMINISTRATION FOR NEUROINFLAMMATION

- NECESSARY FOR NEUROINFLAMMATION CONTROL
- RECOMMEND INTERMITTENT, AFTERNOON, LOW DOSAGES
- METHYLprednisolone 4 MG OR Dexamethasone .
  5 - .75 MG, 3 TO 5 DAYS A WEEK

OXYTOCIN

- MAIN FUNCTION IS ANALGESIA
- OPERATES ON NEURONS AT BRAIN/SPINAL CORD JUNCTION
- USED SUBLINGUAL PRN 20 TO 60 UNITS
- CAN USE WITH KETAMINE

PREGNENOLONE

- PRECURSOR OF ALL OTHERS
- MOST PLENTIFUL IN CNS
- NMDA ANTAGONIST
- GABA RECEPTOR AGONIST
- NEUROPROTECTIVE/NEUROGENIC
  - Supplement Dosage 25 to 100 mg
  - Therapeutic Dosage 100 – 400 mg
ANDROGENIC/NEUROGENIC HORMONES

- HUMAN CHORIONIC GONADOTROPIN (HCG)
- HUMAN GROWTH HORMONE (HGH)
- NANDROLONE

TOPICALS

ESTRADIOL/MEDROXYPROGESTERONE

- 4 MG PER OUNCE – 20 MG PER OUNCE
- USE OVER INFLAMED LUMBAR OR CERVICAL SPINE, KNEES, MUSCLES
- ARACHNOIDITIS/CAUDA EQUINA INFLAMMATION AND LEAKAGE
- PENETRATION ENHANCED BY ELECTROMAGNETIC DEVICES OR HEAT

SUMMARY

- HORMONE TESTING AND TREATMENT ESSENTIAL IN MANAGEMENT OF SEVERE CHRONIC PAIN
- DIFFERENT HORMONES HAVE SPECIFIC USES
- OXYTOCIN IS A FLARE TREATMENT AGENT
- SOME CORTICOSTEROIDS SUPPRESS MICROGLIAL CELLS AND NEUROINFLAMMATION
References

References

References (cont)


