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THE NECESSITY TO REGENERATE AND TO "RECHARGE" YOUR ENDORPHIN RECEPTORS

Part 5- of a 5-part series

The brain and spinal cord (CNS) endorphin receptors that relieve pain are made of protein. Recent research has determined that these receptors can and must be regularly maintained ("fortified") and ("recharged") or they will cease to provide pain relief. Everyone is aware of opioid tolerance in that a higher and higher dosage of opioids, over time, is required to obtain the same pain relief. Tolerance is now known to be caused by receptor "wear-out." In recent years, the concept of "hyperalgesia" has been recognized, and it is a type of end-stage tolerance when pain is magnified, and opioids quit working. When this occurs, it is usually with intrathecal or high dose, long-acting opioids, which cause the receptors to become "worn out." Endorphin receptors need a break from constantly being "soaked" and stimulated by these long-acting, or intrathecal opioids.

THE RECEPTOR PROBLEM

Every dose of an opioid is like starting your car or stretching a rubber band. Every time you start your car you run down your battery and every time you stretch a rubber band you destroy some elasticity. Both your battery and the rubber band will eventually stop working. Every dose of opioid wears down your endorphin receptors, but unlike your battery or rubber band, you can't just go out and buy new ones! You can however, recharge and regenerate your endorphin receptors. Unfortunately, many, IPS patients have awakened one day to find their endorphin receptors are like an exhausted car battery or an over-stretched rubber band, they just don't work anymore. The fact is that you need to daily practice measures to keep you endorphin receptors in top shape if you take daily opioids.

DANGER SIGN

If you start needing more and more opioid to relieve your pain, take this as a sign that your endorphin receptors are starting to "tank." Take action immediately or you may suffer irreversible consequences.

FUNDAMENTAL MEASURES FOR RECEPTOR "RECHARGE" AND REGENERATION

#1. Avoid long-acting and intrathecal opioids if at all possible. Receptors need time to recharge between dosages.
#2. Daily protein- 50 grams minimum.
#3. Restrict sugars-excess glucose damages receptors

NEW MEASURES

Although early, our Research and Education Project has preliminarily identified four measures which persons on daily opioids should try in an effort (no guarantee) to regenerate and recharge your endorphin receptors.

#1. Taurine-Dosage is 4000 to 8000 mg. on 2 to 3 days per week.
#2. Pregnenolone-Dosage is 50 to 100mg. on 2 to 3 days a week.
#3. Testosterone and Estrogen- Gonadal hormones regenerate receptors. The "old-fashioned" monthly estrogen shot, or testosterone replenishment, may be very helpful.
#4. Agmatine-The newest possibility for endorphin receptor regeneration is this derivative of arginine. It actually reduces opioid tolerance in receptors, and therefore increases opioid effectiveness. The best way to take it is not yet clear. A single dosage is 1000 to 1500 mg. It can be taken simultaneously with a short-acting opioid or taken alone at a dose of 2000 to 3000 mg. on 2 or 3 days a week. We are carefully monitoring this new agent.

Note: Endorphin receptor regeneration is a top research endeavor of the IPS Research and Education Project of the Tennant Foundation.

References:1. Jones. Gonadal Steroids and Neuronal Regeneration: A Therapeutic Role. Adv Neural 1993; 59:227-45.
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4931 W. Central, Wichita, KS, 67212 Phone: 626-716-2689 Fax: 316-260-4077
E-mail: tennantfoundation92@gmail.com www.arachnoiditishope.com www.intractablepainsyndrome.com

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