Low Dose Naltrexone (LDN) and Sexual Functioning

for people with autoimmune conditions and for those who are **healthy**

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disclaimers

- These slides present a simplified version of a more comprehensive presentation.
  - for the original presentation, supporting data and references please contact me at Dr.Mark.Shukhman@gmail.com
- Human sexual response is not limited to a mechanistic interplay of hormones, neurotransmitters etc. This presentation however is only focused on those aspects of sexual functioning that are possibly modifiable with LDN:
    - mostly, the opioid system and inflammation.
- some of the hypotheses are original and require more studies before they can be recommended for implementation.

Sexual Dysfunctions are common in the general population

- Men: 30-50% (“any problem”)
  - #1 – ejaculating too rapidly (~30%)
  - #2 – erectile difficulties
- Women: 40-60% (“any problem”)
  - orgasmic difficulties – 40%
  - arousal problems – 35%
  - low sexual desire – 25%

and even more common in Chronic Illness

Men

Erectile dysfunction 50-75%

ejaculatory dysfunction and/or orgasmic dysfunction (50%)

reduced libido (40%)

anorgasmia (37%)

Women

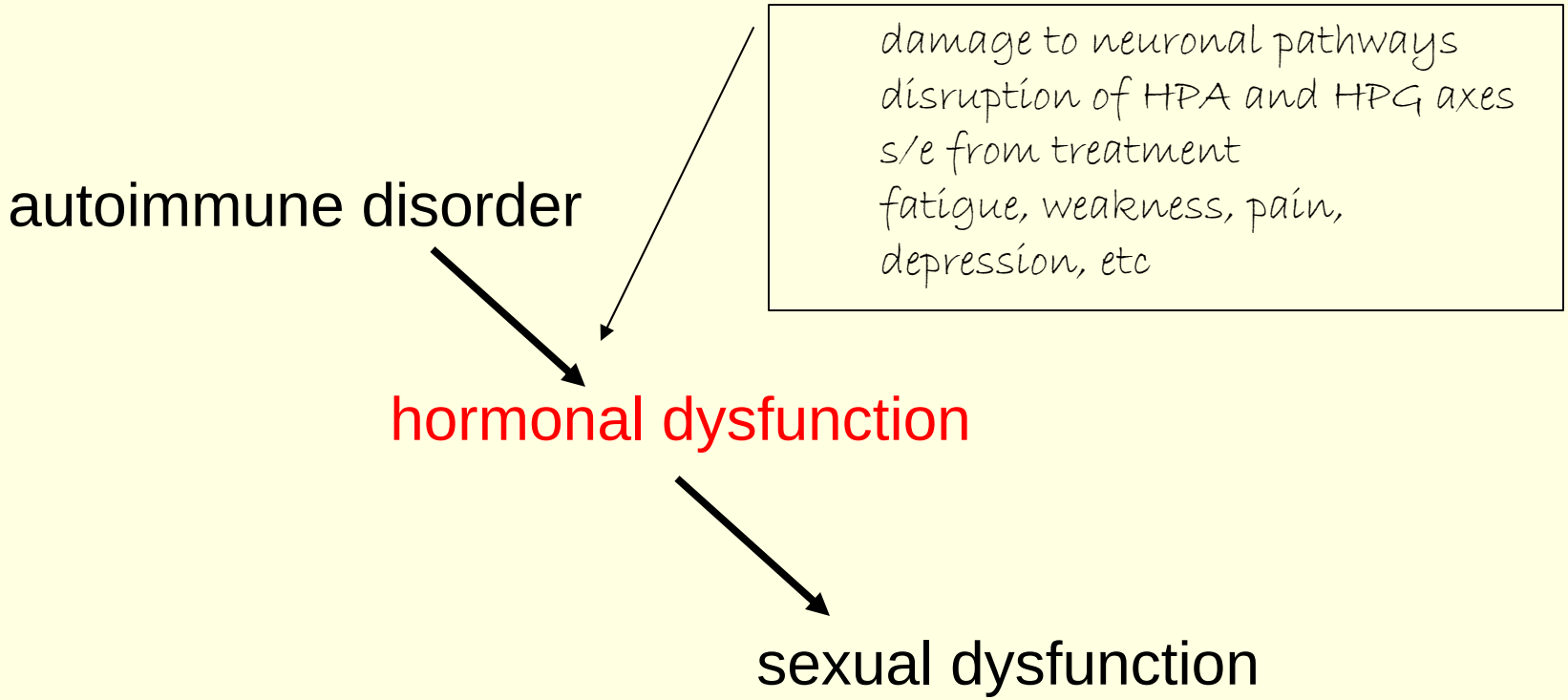
40%–75% “any problem”

reduced libido, difficulty in achieving orgasm (40%)

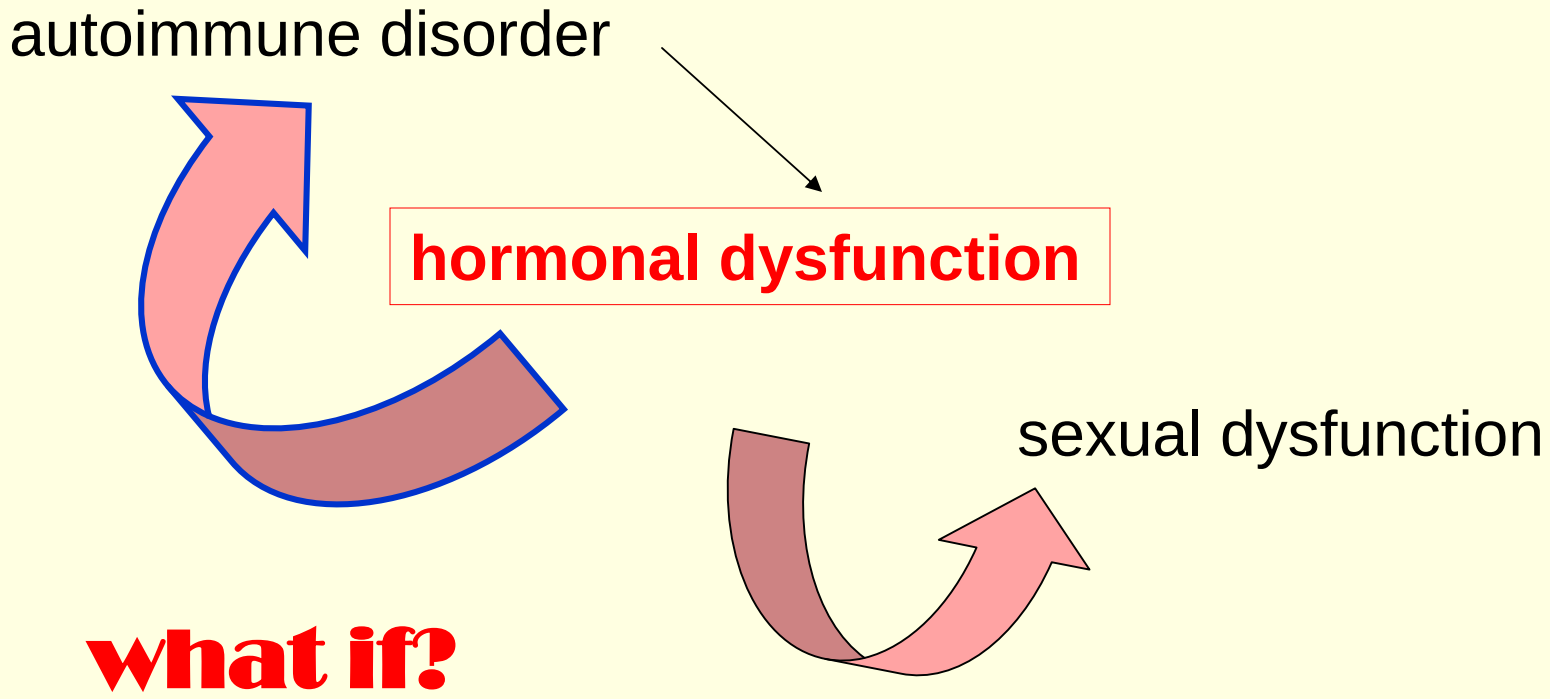
reduction in the tactile sensations vaginal dryness (35%)

pain, reduced libido (30%)

Autoimmune Disorders can cause sexual dysfunctions



Could ***hormonal dysfunctions*** be the cause of autoimmune disorders?



Autoimmune Disorders and Hormones

- autoimmune disorders: female > male
  - Even more frequent after pregnancy
- some women feel better when pregnant
  - May last for a few month after pregnancy
- problems with fertility
  - May improve after treatment
    - interferon, LDN, etc
- anti-sperm antibodies in men

  - prolactin ~ pro inflammatory
  - oxytocin ~ anti-inflammatory

Hormones in MS

- more prevalent in women
  - flares might be in rhythm with menstrual cycle
- role of low Testosterone:
    - 50% of men with MS have low T
    - women with low T have the most brain lesions on MRI
- sex steroids have survival-promoting role
  - progesterone is pro-myelinating (↓cell death)
    - ↑relapses in the beginning of the menstrual cycle
    - improvement of disease with pregnancy
  - estradiol: → ↑progesterone in the brain (neuroprogesterone)

Is Hormone Replacement Therapy one of treatments for autoimmune disorders?

Doctors do not ask, Patients do not tell

- Not a part of a routine exam
  - doctors: *No time, no training*
  - patients: "*am I supposed to mention it*?"
- What is a sexual dysfunction?
  - A problem that bothers you or people around you
- problems are blamed on the "main" illness:
  - fatigue, pain, lack of sleep, tiredness, decreased sensation, dryness, self-image, depression, etc etc

The Internet *is* Talking

Author | **Topic: LDN (Naltrexone) Boosted My Testosterone! (Read 6431 times)**

instantk
Full Member
Posts: 143

LDN (Naltrexone) Boosted My Testosterone!
« **on:** December 01, 2013, 09:35:04 am »

I have had hashimotos with my antibodies being around 2500... just after a few months of using LDN my antibodies were 500 and my testosterone went from 400 to 1000.....

I did read small amount of other users saying how LDN boosts the pituitary LH similiar to HCG ... but theres only a small amount of research out there on it for testosterone

« Last Edit: December 01, 2013, 10:31:44 am by PeakT »

Logged

PeakT
Administrator

Re: LDN (Naltrexone) Boosted My Testosterone!
« **Reply #1 on:** December 01, 2013, 09:46:10 am »

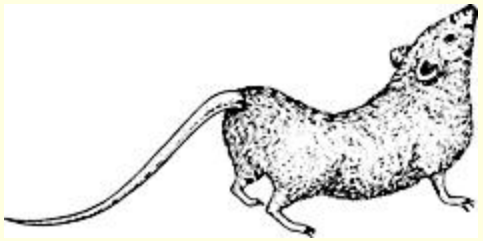
> **senseix said**
>
> it does have a huge affect on Libido, i'm sure the g/f doesn't mind, but i was like woah i'm a horn dog LOL.

why do we expect LDN to work?

- LDN is as an opioid blocker
  - shown to work for addiction to porn and sex
  - Naltrexone was well studied in “traditional doses”
  - opioid blockade effects hormonal levels
- LDN is as enhancer of endorphins
  - endorphins play significant role in sexual functioning
  - endorphins participate in post-coital hormonal changes
- LDN is as a regulator of the inflammatory process
  - inflammation affects sexual functioning

Naltrexone in Animal Studies

- ↑sexual receptivity and proceptivity
  - ↑courtship, ↑exploratory and copulatory behaviors
    - induction of copulatory behavior
    - approaches of the female to the male
    - libido during anoestrus
  - facilitation of sexual performance:
    - benefits in sexual exhaustion
    - ejaculation frequency
    - display of receptivity immediately following coitus



- long term (!) effects
  - after neonatal exposure to naltrexone:
    - advancing puberty, ↑ copulatory behavior as adults
    - lordosis was better preserved after morphine exposure

Naltrexone in Human Studies

- increase in sexual drive, arousal and activity
  - ↑intensity of arousal, ↑intensity of orgasms ↑successful coitus, ↑recurrent spontaneous erections ↑episodes of masturbation
- ED improvement (in some cases, “permanent”)

- also: ↓SD in men under stress, sexual arousal during opioid abstinence, menstrual-cycle dependent ↑LH in women

- some studies show negative results
  - conflicting results about changes in LH, FSH, arousal in women, testosterone and cortisol changes in men

Endorphins in male impotence

Psychoneuroendocrinology 1989; 14(1-2): 103-11 (Fabbri, A et all)

- Hypothesis: an alteration in central opioid tone is present in idiopathic impotence and is involved in the impairment of sexual behavior
- Study: 30 male patients 25-50 y/o with idiopathic impotence
  - > 1 yr; no organic etiology.
  - Groups: naltrexone (50 mg/day) vs placebo
    - for 2 weeks
    - number of successful coitus increased (day 7 and 15)
  - improvement of sexual performance: 11/15 patients.
    - increase in morning and spontaneous full penile erections/week in 15/15 patients.
    - no significant modification of plasma LH, FSH or testosterone
      - The positive effect was likely exerted at a central level.
- A two-month follow-up:
  - erectile capacity had returned to baseline in 10/15 patients
  - complete recovery from sexual problems: 5/15 patients

can LDN be more effective than Naltrexone?

Naltrexone, not LDN was used in most of the studies.

It appears however that the study was more likely to report positive results if:

- a lower dose of naltrexone was used
- the result was measured at a longer time interval after the administration

NCBI Resources How To

PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed

Advanced

Arch Med Res. 2001 May-Jun;32(3):221-6.

Naltrexone-induced augmentation of sexual response in men.

Sathe RS[1], Komisaruk BR, Ladas AK, Godbole SV.

- 20 men age 20-29
- Groups: Naltrexone **25 mg**/day x3 vs placebo
- Watching porn for 2 hrs
  - **18-22 hrs after receiving naltrexone**
- Improvement was seen in:
  - Number of orgasms, Intensity of orgasms
  - Intensity of sexual arousal
    - At the time of the 1st orgasm
- CONCLUSION:
  - …. The findings suggest that naltrexone could be clinically useful in cases of inhibited sexual desire and erectile dysfunction

treating Inflammation (with LDN?) might improve Sexual Functioning

Erectile dysfunction is associated with the same factors as inflammation

- high sensitive C-reactive Protein (hsCRP)
- IL-1β, IL-6, TNF-α
- endothelial-protrombic mediators,
- vWB, tPA, PAI-1, fibrinogen
- infections with Chlamidia or CMV cause ED

inflammation acts on eNOS as “anti-Viagra”

- moreover: NO is anti-inflammatory

Endorphins and Sexual Functioning

Exogenous opioids have transient positive impact

- Positive effect similar to small doses of alcohol
  - Prior to Harrison Narcotic Act in 1914, Opioids were often prescribed by physicians for “female troubles”
    - prior to 1914, 1.5-2 times more ♀ than ♂ used
- can decrease nervousness → ↑receptivity
  - ↑sense of well being and relaxation after sex
- can balance the effects of excitatory substances released during sex
- Can be used as a “pain brake”
  - Sex can temporarily decrease pain (via endorphins?)
- can preserve Testosterone during times of stress

long term use of opioids (pain pills?) "replacement of sexual pleasure by opioids"

Male:

- initially, small doses – delaying ejaculation
  - young men use heroin to please or impress
- prolonged use – loss of erection, ↓testosterone
  - SD is a frequent reason to stop methadone
    - in withdrawal – improvement in desire and spontaneous erections

Female:

- initially – relaxation, disinhibition
- prolonged use – lack of desire, anorgasmia
  - 65-90% heroin users have menstrual problems
    - better after switch from methadone to buprenorphine
    - sexual dysfunctions often persist

Endorphins and Sexual Functioning

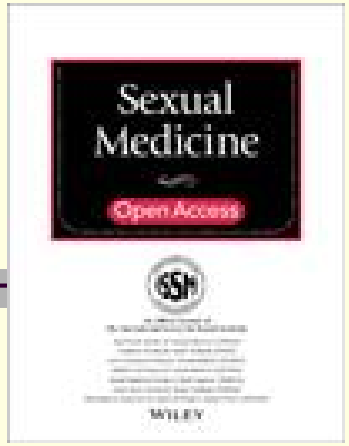
endorphins help more to feel good ***after sex***
than to ***want sex*** or to be ***able to perform***.

- high level of endorphins is seen in castrated rats
  - ↓T → ↑beta-endorphins

- endorphins → ↓oxytocin, ↑prolactin, ↓testosterone → *inflammation!*
  - wave of sadness and despair
  - ↓desire of sex, ↓desire to bond

- surge of endorphins helps to END the act of sex.

Postcoital Dysphoria (PCD)



Postcoital Dysphoria:

Prevalence and Psychological Correlates

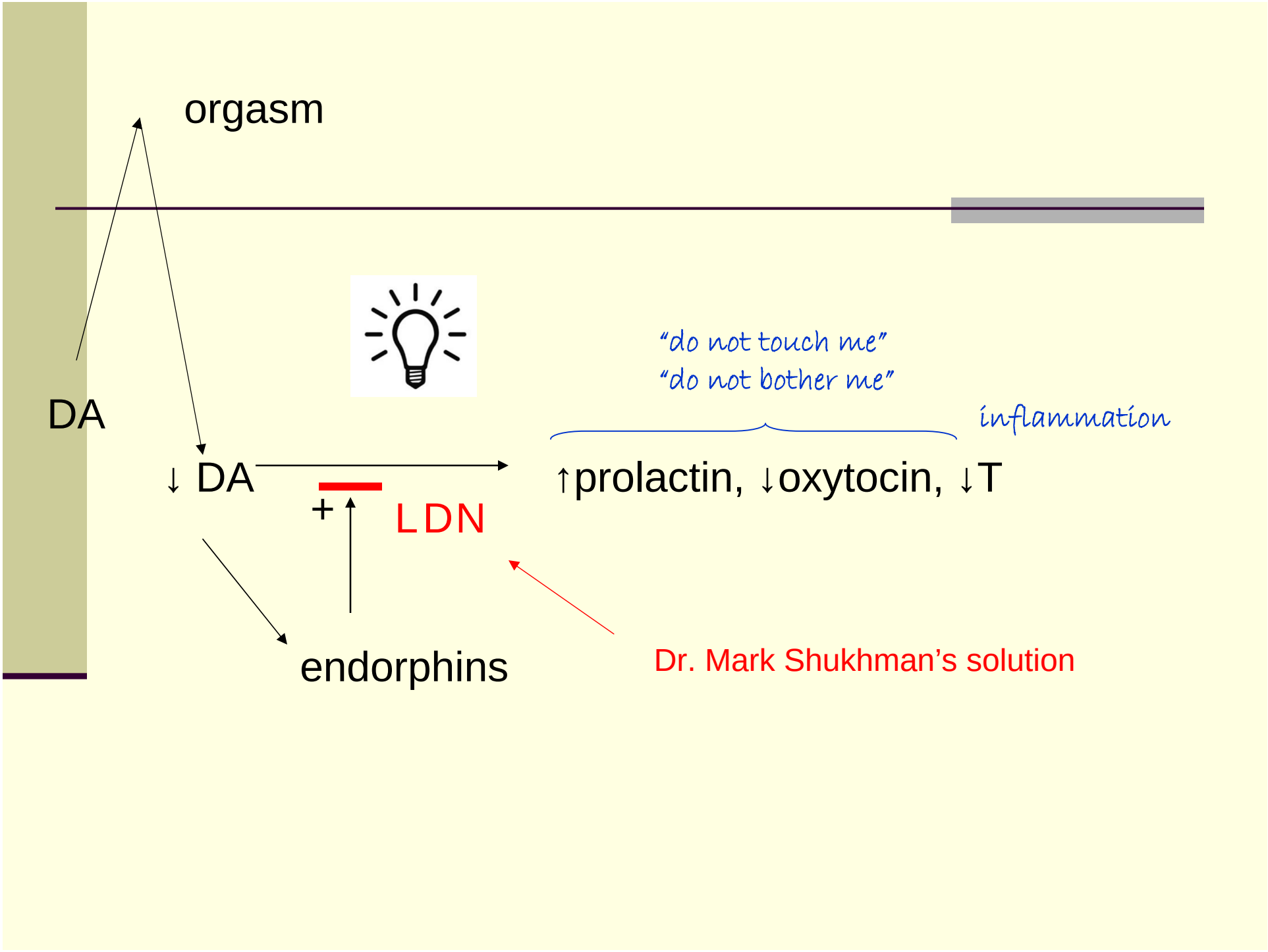
- Robert D Schweitzer at al, Sexual Medicine, Oct 2015
- 46% women had it more than once

- "Every animal is sad after coitus except the human female and the rooster.“
  - Galen
- “…after the enjoyment of sensual pleasure is past, the greatest sadness follows. If this does not completely engross, still it thoroughly confuses and dulls the mind."
  - Baruch Spinoza

currently offered solutions

based on the observation that orgasm can cause sadness, despair and even a flair of an autoimmune illness …

- Chastidy, Tantra, Karezza
  - techniques to avoid orgasms
- medications
    - At the expense of ↓intensity of orgasm, etc
- the use of the “Cooligde effect”
  - keep changing partners


orgasm
DA
↓ DA
+
LDN
endorphins
"do not touch me"
"do not bother me"
inflammation
↑prolactin, ↓oxytocin, ↓T
Dr. Mark Shukhman's solution

using LDN for sexual dysfunctions

- treat your medical condition(s)
  - include LDN in treatment
  - replace some of your medications with those that are less likely to cause sexual side effects
- know exactly what you want to improve and have realistic expectations
  - address psycho-social issues
- do not use high doses immediately before sex
  - unless when used to treat a sexual addiction
- do not take LDN too far in advance

Stay tuned for the next presentation with more specific tips or contact Dr. Mark Shukhman

we are looking for volunteers

- available research studies:
  - time and dose of administration
  - experiences on LDN vs placebo
- why participate:
  - for the advancement of science
  - to improve own sexual experience
  - to find out what is “normal”; “am I missing something?” “how do I compare to others” (if you want to know),
  - we can talk to your partner about the issues that you wanted to discuss but did not feel comfortable
- how to participate:
  - please contact me at Dr.Mark.Shukhman@gmail.com