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Q / Which treatments help women with reduced libido?

EVIDENCE-BASED ANSWER

A / SEVERAL TREATMENTS produce modest, but statistically significant, clinical increases in sexual desire and function in women.

The testosterone transdermal patch improves hypoactive sexual desire disorder (HSDD) in postmenopausal women

(strength of recommendation [SOR]: **A**, 2 randomized controlled trials [RCTs]).

Bupropion may be effective for HSDD in premenopausal women (SOR: **B**, 2 RCTs).

Sildenafil improves HSDD associated with selective serotonin reuptake inhibitors (SSRIs) (SOR: **B**, 1 RCT).

Evidence summary

Two RCTs examined the effect of testosterone on postmenopausal women with HSDD. One trial randomized 272 women ages 40 to 70 years to a 300-mcg transdermal testosterone patch (TTP; 142 women) or placebo (130 women).¹ At 6 months, women using the TTP reported more sexually satisfying episodes (1.69 vs 0.59 episodes in 4 weeks; $P=.0089$) and a minimal increase in sexual desire scores (12.2 vs 4.56 on a 100-point sexual desire scale; $P=.0007$) compared with women using placebo.

A second trial randomized 814 postmenopausal women (mean age 54.2 years) to placebo (277 women), a 150-mcg TTP (267 women), or a 300-mcg TTP (270 women).² At 24 weeks, women taking 300 mcg (but not 150 mcg) of testosterone reported a greater number of satisfying sexual episodes than women taking placebo (2.1 vs 0.7; $P<.0001$). The 300-mcg TTP caused more unwanted hair growth than placebo (19.9% vs 10.5%; no P value given). The study didn't continue long enough to assess cardiovascular risks.

Bupropion may improve sexual function in premenopausal women

Two RCTs found benefit from bupropion for premenopausal women with HSDD. In the first, investigators randomized 232 women

20 to 40 years of age to bupropion sustained release (SR) 150 mg daily or placebo. They assessed sexual function at 12 weeks with the Brief Index of Sexual Functioning for Women—a scale with scores ranging from -16 (poor functioning) to $+75$ (maximum functioning), with a mean value in normal women of 33.6.³ Women taking bupropion reported greater increases in scores than women taking placebo (15.8 to 33.9, vs 15.5 to 16.9; $P=.001$) and no serious adverse events.

A second RCT randomized 66 premenopausal women (mean age 36.1 years) to take either bupropion SR 150 mg daily, increased to 300 mg daily after one week, or placebo.⁴ Researchers measured sexual responsiveness (arousal, pleasure, and orgasm) using the Change in Sexual Functioning Questionnaire at baseline and on Days 28, 56, 84, and 112. Women taking bupropion had higher scores by Day 28 than women taking placebo and maintained the difference through Day 112 ($P=.05$). The authors indicated that the clinical significance of the change is unclear.

Sildenafil increases low sexual desire associated with antidepressants

A double-blind RCT enrolling 98 premenopausal women (mean age 36.7 years) with sexual dysfunction related to SSRIs found that

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sildenafil (50-100 mg) improved sexual functioning more than placebo using the 7-point Clinical Global Impression score (sildenafil: 1.9 points; 95% confidence interval [CI], 1.6-2.3; placebo: 1.1 points; 95% CI, 0.8-1.5; $P=.001$).⁵

The investigators didn't specify whether the change was clinically significant. However, another RCT that studied 881 pre- and postmenopausal women with HSDD unassociated with SSRIs found no difference between sildenafil (10-100 mg) and placebo.⁶

Recommendations

The US Food and Drug Administration doesn't recommend androgens for female sexual dysfunction.

The Endocrine Society says that bupropion may be used for HSDD (although it isn't licensed for such use) and doesn't recommend long-term use of testosterone because of inadequate safety studies.⁷

The North American Menopause Society recommends testosterone therapy for postmenopausal women with HSDD.⁸ **JFP**

References

1. Panay N, Al-Azzawi F, Bouchard C, et al. Testosterone treatment of HSDD in naturally menopausal women: the ADORE study. *Climacteric*. 2010;13:121-131.
2. Davis SR, Moreau M, et al. Testosterone for low libido in women not taking estrogen. *N Engl J Med*. 2008;359:2005-2017.
3. Safarinejad MR, Hosseini SY, Asgari MA, et al. A randomized, double-blind, placebo-controlled study of the efficacy and safety of bupropion for treating hypoactive sexual desire disorder in ovulating women. *BJU Int*. 2010;106:832-839.
4. Seagraves RT, Clayton A, Croft H, et al. Bupropion sustained release for the treatment of hypoactive sexual desire in premenopausal women. *J Clin Psychopharmacol*. 2004;24:339-342.
5. Nurnberg HG, Hensley PL, Heiman JR, et al. Sildenafil treatment of women with antidepressant-associated sexual dysfunction. *JAMA*. 2008;300:395-404.
6. Basson R, McInnes R, Smith MD, et al. Efficacy and safety of sildenafil citrate in women with sexual dysfunction associated with female sexual arousal disorder. *J Womens Health Gen Based Med*. 2002;11:367-377.
7. Wierman M, Basson R, Davis SR, et al. Androgen therapy in women: an Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab*. 2006;91:3697-3710.
8. Braunstein GD. The Endocrine Society Clinical Practice Guideline and The North American Menopause Society position statement on androgen therapy in women: another one of Yogi's forks. *J Clin Endocrinol Metab*. 2007;92:4091-4093.

PRACTICE OPPORTUNITIES



Family Practice Physician Physical Disability Board of Review Alexandria, Virginia

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The **Family Practice Physician** primary function will be to review Disabled Veterans Administration (DVA) disability rating for the specifically military unfitting condition(s) with the Physical Evaluation Board (PEB) combined disability rating and consider any variance in its deliberations and any impact on the final PEB combined disability rating, particularly if the DVA rating was awarded within 12 months of the Service member's separation. The Family Practice Physician shall also review the complete case record that served as the basis for the final Military Department PEB rating determination and, to the extent feasible, collect all the information necessary for competent review and recommendation.

SCOPE OF: Physical Disability Board of Review. The PDBR adjudicates cases upon which review is requested or undertaken on its own motion. The PDBR has no greater obligation to our wounded, ill, and injured Service members and former Service members than to offer fair and equitable recommendations pertaining to the assignment of disability ratings.

BACKGROUND:

The Warrior Care Policy is responsible to ensure Wounded, Ill, and injured transitioning warriors receive high quality care and seamless transition support through proactive leadership, responsive policy, and effective oversight and interagency collaboration and the Physical Disability Board of Review (PDBR) in their mission to ensure service members receive a fair and accurate reassessment of their DoD disability rating. Services will be performed at the Physical Disability Board of Review, Hoffman Building 200 Stovall Street, Alexandria, Virginia.

Requirements:

1. Completion of residency or fellowship in Family Medicine acceptable to the Surgeon General, HQ USAF or PDBR.
2. Current board certification by the American Board of Family Medicine.
3. At least 24 months of experience within the last 36 months. Must have experience with military or Veterans Affairs Medical Evaluation Board.
4. Military Background desirable, not required.
5. Familiarity with post traumatic stress disorders highly desirable
6. The Family Practice Physician shall have and maintain a current unrestricted license to practice medicine. Must meet all licensing and certification requirements to perform as a Family Practice Physician, currently licensed in the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, or the US Virgin Islands.

If interested, please forward CV/Resume to ruben.perez@eagle-app-sci.com or contact me at 210-477-2798.