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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

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