Lust, Caution

Women—and drug companies—have long been searching for a way to ignite sexual desire.
Now, with the race heating up, Alexis Jetter investigates the controversial quest for a female Viagra. Photographed by Steven Klein.

## SETTING THE MOOD

Women have few options to boost libido. Agent Provocateur slip with lace overlay and trim. Hair, Jimmy Paul for Bumble and Bumble; makeup, Stéphane Marais. Prop stylist, Andrea Stanley at the Wall Group; produced on location by North Six. Details, see In This Issue. Fashion Editor: Phyllis Posnick.





t's Valentine's Day 2012, and your lover is already in bed, hinting madly. But, as on most nights of late, you're just not up for sex—not without a little boost. Slipping into the bathroom, you consider your options. The remote control for the Orgasmatron is in the bottom drawer. That's tempting: Just flip it on, adjust the dial, and the electrodes implanted in your lower spine should do the trick. But you can't help worrying that the battery implanted in your hip might overheat—which is not exactly the sizzle you had in mind.

Opening the medicine cabinet, you pull out the slyly named LibiGel. Just one pea-size drop of the testosterone gel, rubbed into your upper arm daily, might get you in the mood. But the risks of herapy give you pause, and besides, you've still

hormone therapy give you pause, and besides, you've still got plenty of testosterone surging through your body. The love injection is another possibility. You eye the hypodermic syringe of bremelanotide, the synthetic peptide that promises hours of delirious arousal. Let's face it, though: Shooting up for sex feels weird.

It's decision time. You grab the vial of flibanserin pills from the top shelf. The experimental antidepressant was a flop until women (and men) in a pilot study mentioned that, while still

gloomy, they were feeling decidedly sexy. Company researchers admit that even they don't fully understand how flibanserin alters brain chemistry to stir desire.

But time is fleeting. You pop the pill and cross your fingers.

Forget vibrators, soft porn, and Marvin Gaye. Women's sexual problems may soon be remedied with a pill, a gel, a shot, or a jolt. All are in the pipeline seeking approval from the U.S. Food and

Drug Administration. And all are designed to treat what some sex therapists and drug companies are increasingly calling a psychiatric disorder: female sexual dysfunction. Depending on which study you believe, crippling sexual problems—affecting desire, arousal, and orgasm—afflict either 12 percent or nearly half of all women in the United States.

Whether a woman's lagging libido is a medical ailment or simply a natural response to job burnout, child rearing, or a stale relationship is a hot topic among psychiatrists and endocrinologists. How to treat low sex drive in women is another minefield. There is no Viagra for women. In fact, the "pink" Viagra is a misnomer: The erectile-dysfunction drug doesn't boost desire; it just helps men act on it. Viagra may help some women achieve orgasm, but only if their libido is fully charged.

Women have slim pickings in the sex-drug marketplace. Topical creams, botanical oils, and herbal dietary supplements may heighten genital sensitivity, but the FDA doesn't closely regulate such products, so their effectiveness is unknown. Doctors have jumped in, giving women an estimated 2 million "off label" prescriptions every year for high-dose—and potentially risky—testosterone pills, creams, gels, and ointments. For now, though, there are no FDA-approved sex

drugs for women. Pharmaceutical companies and device-makers have been scrambling for years to cash in on the largely untapped market in female desire: an estimated \$2 billion to \$4 billion in annual sales.

That lure has revved up American ingenuity in previously unimaginable ways. Having trouble reaching orgasm? In just a few years, the Orgasmatron spinal-cord stimulator—now available only in a nine-day-trial version—may be fully implantable, with a subcutaneous battery lodged inside what its inventor calls "the anatomical love handle." Stuart Meloy, M.D., says his device delivered orgasms on demand for four of eleven women in his small study. He hopes to persuade others to spend about \$12,000 for the semipermanent gadget. The catch: First Meloy has to convince regulators that the benefits of the Orgasmatron outweigh the risks of lodging electrodes near the spine: paralysis, infection, and incontinence, to name a few.

Bremelanotide—the arousal injection—generated a lot of buzz when it was first introduced as an aphrodisiac nasal spray. But the spray spiked blood pressure in early trials and had to be yanked. The hypodermic version appears to avoid that problem, but testing is still under way.

A more appealing aphrodisiac may be within reach. Two firms are racing to develop the first prescription drug for

women's most common sexual complaint: distressingly low libido, which psychiatrists call hypoactive sexual desire disorder (HSDD). In the last few months, the makers of LibiGel and flibanserin claim they've discovered how to stimulate nerve centers in the female brain that control libido. Just how effective the drugs are remains unclear. The German drug giant Boehringer Ingelheim reported last November that in a six-month study of more than 1,000 women, a daily 100-mg

dose of flibanserin gave premenopausal women 0.8 more "sexually satisfying events" per month over a placebo. (That metric doesn't necessarily mean a woman has more orgasms, or even more sex. SSEs can include greater fantasies, arousal, and orgasms—or just feeling closer to a partner.) BioSante, the Chicago-area company that makes LibiGel, announced that 46 postmenopausal women who used it for three months had three more sexually satisfying events per month than women who received a placebo.

Flibanserin will be marketed first to premenopausal women and then, potentially, all women, officials for Boehringer Ingelheim say. LibiGel will target the postmenopausal crowd, whose levels of testosterone have declined. "If you have a normal level of testosterone and we give you more, that might elicit some safety issues," cautions Stephen Simes, the CEO of BioSante. Yet if approved, the gel could be prescribed off-label to young women as well.

Some experts question whether the desire drugs should be used at all.

"The placebo effect is really large," notes Leonore Tiefer, Ph.D., a psychologist at the New York University School of Medicine who opposes what she calls the medicalization of female desire. "That's what we should be investigating. Why

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is it that so many women's sex lives improve when you give them a placebo?

"It's not like Viagra, which you take an hour before sex and if it doesn't agree with you, you throw the bottle away," Tiefer adds. "You have to take this powerful steroid for months before it has systemic effects. And the makers of flibanserin keep saying that they have no idea how it works. That just strikes me as terrifying."

Anita Clayton, M.D., a psychiatrist at the University of Virginia who has conducted industry-funded studies of both LibiGel and flibanserin, concedes that flibanserin's brain effects are only partly understood: "It presumably frees up the inhibitory effect of serotonin on desire." But she says that shouldn't stop a woman from taking a drug that helps her. "Frankly, as a psychiatrist, I see women who are suffering, and we need to do something to relieve it."

Some women don't need any convincing. Cheryl Newman, a teacher in Oak Park, Illinois, decided to join the clinical trial for LibiGel when her sexual desire tanked. "I went from often being the initiator to feeling, You want to do what? Didn't we just do that a month ago?" Newman says. "It wasn't fun for me, and it certainly wasn't fun for my husband." After a year and a half in the study—whether on the drug or a placebo, she doesn't know—Newman says she's feeling noticeably sexier. "I'm not going to tell you that I feel like I'm 23 and in a brandnew relationship. But I'm definitely more open."

Susan Davis, M.D., an endocrinologist at Australia's Monash University School of Medicine who is a leading researcher of and unabashed advocate for—testosterone use in women, says the hormone works for about 60 percent of the women to whom she's prescribed it. "They say they feel more vital. They've got their mojo back. They may not be jumping out of their skin and saying, 'I want to have sex tonight, darling.' But if the partner makes overtures, they're more responsive." Davis concedes, however, that testosterone may have a downside. Her own study of an abdominal testosterone patch developed by Procter & Gamble, which the FDA rejected in 2004, found four cases of breast cancer among the 534 women using the patch, and none in the placebo group. BioSante, which plans to ask for FDA approval of LibiGel next year, based on one year of safety studies, has promised to continue testing the gel in up to 3,000 women for another four years after the drug gets a hoped-for green light.

But Steve Nissen, M.D., director of cardiovascular medicine at the Cleveland Clinic, says there's not nearly enough information about the long-term effects of either LibiGel or flibanserin to prescribe them safely. He's particularly worried about testosterone, especially if women start taking it in their 20s and 30s and continue for decades. "We know that manipulating hormones in women has a bad history," Nissen says, adding that cancer isn't the only concern. Oral testosterone can cause liver damage—and lower good-cholesterol levels. "When we give testosterone to women, are we setting them up to have a male pattern for heart disease?" The bottom line, he says, is that women may be looking for libido in all the wrong places. "The reality is that people with HSDD often have other issues, and a drug isn't always the answer to that."

That's the message of a biting new documentary, Orgasm Inc., a behind-the-scenes look at the race to develop drugs, devices, and surgery to treat female sexual problems. Directed by Liz Canner, the film argues that women are being manipulated by media hype about sexual dysfunction into

using products they may not need and that may harm them. In one disturbing scene, Charletta, an affable Southern woman, talks about her shame at not being able to climax during intercourse with her husband. "Not only am I not normal, I'm diseased," she says. "That feels real bad." The camera searches her face as Stuart Meloy, creator of the Orgasmatron, prepares to insert an electrode wire into her lower back and thread it up her spine. "Female sexual dysfunction per se probably runs 83 percent," Meloy tells her. "Orgasmic dysfunction is a subset of that." Charletta shakes her head, visibly stunned. "I think there's a tremendous need, then, to do this for women," she says.

The Orgasmatron didn't work for Charletta. She had the electrodes removed after they succeeded only in stimulating her left leg. She's disappointed, she says, but resigned to her fate. Back at home, Charletta casually confides that she doesn't have orgasmic disorder at all."I can have orgasm," she explains. "But it's not the normal situation where two people get together and have sexual intercourse, and each has an orgasm."

When filmmaker Canner, speaking from behind the camera, informs Charletta that 70 percent of women need clitoral stimulation to climax, Charletta looks incredulous, then bursts out laughing. "I no longer know what's normal," she says finally, with palpable relief. "You've turned that upside down for me. So that's wonderful because that's a brand-new start."

## **Decoding Desire**

Distressingly low libido, the most common female sexual disorder, is estimated to affect one in ten U.S. women. The key word is distress: Up to one in four premenopausal women says her sex drive has waned, but only half are actually bothered by that. Without distress, psychiatrists don't consider that sexual problems either are "dysfunctional" or need treatment. A respected 2008 national survey found that 12 percent of women suffer from troubling sexual disorders.

The eye-popping statistic that 43 percent of American women suffer from female sexual dysfunction—a number endlessly repeated on television talk shows and in magazines—has been largely discredited, although it is still cited by doctors and drug companies. That number came from a 1992 survey that asked 1,749 women if, during the previous year, there were several months when they either lacked interest in sex, were unable to climax, climaxed too quickly, experienced pain during intercourse, did not find sex pleasurable, felt anxious, or had trouble lubricating. The women weren't asked if they were upset about these sexual issues. But any "yes" was added to the "dysfunctional" column, which quickly reached 43 percent of the respondents—though the survey's author, University of Chicago sociologist Edward Laumann, cautioned that his data "do not connote a clinical definition of sexual dysfunction."

The search for a desire booster has proved surprisingly difficult, says Leslie Schover, Ph.D., a psychologist and sexuality expert at the University of Texas in Houston. "For men, the big sexual organ is the penis," she says. "For women, it's the brain. You're trying to charge up the brain to stimulate desire and pleasure. That's a far harder thing to do."—A.J.