Sexual Function and Dysfunction During Treatment With Psychotropic Medications

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Advancements in psychopharmacology during the last several decades have brought a sharper focus not only on the efficacy of various psychopharmacologic agents but also on their tolerability. Since many new and old agents are comparable in their efficacy within their class but differ in the nature and frequency of side effects, side effect profiles of many medications became better studied and more marketed. One group of side effects, which, for various reasons, received fairly wide attention during the last 2 decades, is the group of sexual side effects.

The increased focus on sexual side effects started with the arrival of selective serotonin reuptake inhibitors (SSRIs). SSRIs quickly became widely used due to their efficacy in various conditions, ease of use, and tolerability. However, some patients started to complain about delayed or absent orgasm and other sexual problems. It became obvious that predominantly serotonergic medications (not just the new SSRIs but, for instance, the old tricyclic antidepressant clomipramine) may have a profound negative effect on sexual functioning.

Antidepressants, namely SSRIs, have been associated with sexual dysfunction most frequently. However, psychotropic agents from other classes are also associated with sexual dysfunction more or less frequently. Various sexual dysfunctions have been reported with other, non-SSRI antidepressants; mood stabilizers; antipsychotics; antianxiety medications; and others (not usually with psychostimulants, though). As it became clear that sexual side effects were also frequently an unspoken reason for noncompliance (or nonadherence), more reports on their frequency, characterization, and management started to appear. The field of what some call "sexual pharmacology"[1] rapidly expanded.

Nevertheless, even with the entire body of literature on sexual dysfunction associated with psychotropic drugs, many issues surrounding this problem remain unclear. Take the example of rate of sexual dysfunctions: the estimates of sexual dysfunction associated with SSRIs (probably a better-studied group of medications) vary from 30% to 70%. The management of sexual dysfunction associated with medications remains an art rather than a science, partially due to the lack of well-designed studies focused on management of this troublesome clinical problem.

This column summarizes several important issues about sexuality and psychotropic medication, which every clinician managing sexual dysfunction should take into account.

Prevalence

Sexual dysfunction is a rather common problem in the general population. For instance, in a fairly large and detailed National Health and Social Life Survey,[2] 43% of women and 31% of men had experienced sexual dysfunction at the time of the survey.

While it is known that the prevalence of some sexual dysfunctions (e.g., erectile dysfunction) increases with age,[3] old age should not be automatically associated with sexual dysfunction.

Causes

Mental illness. Sexual dysfunction could more or less frequently be associated with the mental illness itself.[4] Lack of sexual joy and libido has been frequently described as part of depressive symptomatology. It is less well known that erectile dysfunction could also be associated with depression and that other mental disorders, such as schizophrenia and most anxiety disorders, are frequently associated with sexual dysfunction, such as low libido. The prevalence of sexual dysfunction in these disorders is frequently underestimated.

Contrary to some beliefs, sexual functioning is an important part of life for many patients with severe mental and other illnesses.

Drugs. Many recreational drugs have a mostly negative impact on sexual functioning, especially with chronic use. One should not forget that nicotine and alcohol could have a negative impact on sexuality as well. [1]

Medications. Psychotropic medications are not the only medications associated with sexual dysfunction. Cardiovascular medications, anticonvulsants, chemotherapeutic agents used to treat cancer, and many other medications frequently have a negative impact on sexual functioning.[1]

Physical illness. Numerous physical diseases, such as diabetes mellitus, hypothyroidism, polyneuropathy, epilepsy, Parkinson's disease, and others, are frequently associated with sexual dysfunction.

Other causes. Sexual dysfunction during treatment with medication(s) does not exist in a vacuum. Patients may frequently externalize the reasons for sexual dysfunction. They may frequently blame medications for a serious ongoing or new marital/sexual discord. Sexual dysfunction reported during sexual encounters with a stable partner yet nonexistent during an affair is clearly not due to medication.

Treatments

Efficacy. Many of the new and old medications touted for treating various sexual problems may actually be useless for certain indications. For instance, sildenafil—a phosphodiesterase-5 (PDE-5) inhibitor—is efficacious in most cases of erectile dysfunction; however, there is no solid evidence of its efficacy in female sexual dysfunction or in orgasmic dysfunction in men. The use of supraphysiologic levels of hormones such as testosterone is not indicated in the treatment of sexual dysfunction.

Safety. Many of the popular drugs and remedies used for sexual dysfunction are not necessarily safe. Examples include the recent U.S. Food and Drug Administration warning about possible blindness (nonarteritic anterior ischemic optic neuropathy [NAION]) associated with the PDE-5 inhibitors, and the various side effects associated with high doses of testosterone, not forgetting the numerous side effects associated with the antidotes used for "counteracting" sexual dysfunction associated with antidepressants (e.g., amantadine, bupropion, buspirone, methylphenidate, and trazodone).

Alternative medications. Some medications may have a positive/beneficial effect on sexual functioning (e.g., bupropion)[5] or are associated with lower incidence of sexual dysfunction than other medications in their class (e.g., mirtazapine, molindone).

Nondrug options. Simple suggestions, such as lifestyle changes including regular exercise, weight reduction, smoking cessation, and reduced intake of alcohol and other substances of abuse, could do "wonders" for patients experiencing sexual dysfunction.[6]

Management

Sexual history and baseline function. A detailed sexual history and detailed evaluation of baseline sexual functioning

are the sine qua non of *any* treatment with psychotropic medication. Appropriate diagnosis of sexual dysfunction associated with medication is impossible without a baseline evaluation of sexual functioning.

Active questioning. Active questioning is an important approach to diagnosing and monitoring sexual dysfunction associated with medications. One should not rely on spontaneous reporting. It is well known that patients tend to underreport sexual problems on questionnaires and that the actual incidence of sexual dysfunction obtained during subsequent direct questioning is much higher. In addition, the questioning about sexual dysfunction should be specific, with a focus on each aspect of the sexual response cycle (i.e., libido, arousal, and orgasm).

Characteristics. It may be useful to conceptualize sexual dysfunction associated with medication as having the following characteristics[1]:

1. dissipates with drug discontinuation or dose reduction
2. not better explained by physical illness or environmental stress
3. onset with drug initiation or dose increase
4. present in all sexual situations
5. reappears with reintroduction of the drug

Basic strategies. Management of sexual dysfunction associated with medication is a difficult clinical problem requiring a great deal of creativity on the side of the treating physician and patience on the side of the patient. Numerous reports exist on treatment approaches to sexual dysfunction associated with various psychotropic medications (e.g., references 7–9). These and other reports recommend several basic strategies for the management of sexual dysfunction associated with medications, such as

1. waiting for spontaneous remission;
2. decreasing the dose of medication to minimal effective dose;
3. switching to another medication from the same class with a lower incidence of sexual dysfunction;
4. considering drug holidays;
5. adding another agent to "counteract" sexual dysfunction, depending on the illness treated with the psychotropic medication, type of psychotropic medication, and character of sexual dysfunction.

An important part of management should be psychoeducation, reduction of psychosocial stressors, enhancement of adherence, and alternative treatment strategies (sex therapy, psychotherapy).

As noted, not all approaches are applicable in all clinical situations. Drug holidays are not applicable (and tested) in the management of sexual dysfunction associated with some antidepressants with a short half-life or with some anxiolytics, among others. Some antidotes, especially the dopaminergic ones, should not be used in antipsychotic-associated sexual dysfunction.

Conclusion

The management of medication-associated sexual dysfunction is clearly an art rather than a science, which requires considerable clinical skills. I hope that the points made in this summary will help interested clinicians in planning the management of this difficult clinical problem.

Drug names: amantadine (Symmetrel and others), bupropion (Wellbutrin and others), buspirone (BuSpar and others), clomipramine (Anafranil and others), methylphenidate (Focalin, Methylin, and others), mirtazapine (Remeron and others), molindone (Moban), sildenafil (Viagra), testosterone (Androgel, Striant, and others), trazodone (Desyrel and others).

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