Pharmacological Interventions with Adult Male Sexual Offenders

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Introduction
The treatment of sexual offending behaviors is complex and involves multiple etiologies, individualized risk reduction and risk management needs, and heterogeneous biopsychosocial, interpersonal, and legal factors. Clinicians and researchers have attempted to identify approaches which promise the greatest success in addressing these behaviors. Findings from a meta-analysis examining the effectiveness of various treatment interventions for adult sex offenders indicated that, when used in combination with other treatment approaches, biological interventions like testosterone-lowering hormonal treatments may be linked to greater reductions in recidivism for some offenders than the use of psychosocial treatments alone (Losel and Schmucker, 2005). Other data, described below, suggest that non-hormonal psychotropic medications can also be effective supplements to standard therapeutic interventions for sex offenders as well.

This document is designed to provide an overview of key issues pertaining to the use of hormonal and non-hormonal agents to reduce or inhibit sexual arousal and recidivism in some sexual offenders. Mechanism-of-action, anticipated results of medication administration, side effects, ethical considerations, and empirical evidence regarding efficacy of pharmacological interventions will be highlighted. It should be noted that pharmacological interventions are not typically used for all sexual offenders, but are often applied to those with paraphilias or offense-specific patterns of sexual arousal which could be altered through the use of such interventions. Further, such interventions should be integrated into a comprehensive treatment program that addresses other static and dynamic risk factors that contribute to sexual offending.

Hormonal agents for managing and sexually abusive and paraphilic behaviors
- A number of hormonal agents have been introduced as pharmacological treatments for reducing testosterone and sexual drive in individuals with paraphilias and/or who have engaged in sexually abusive behaviors. Primary examples include medroxyprogesterone acetate (MPA – Depo Provera), leuprolide acetate, cyproterone acetate, and gonadotropin-releasing hormone analog. These chemical agents, referred to as antiandrogens, act by breaking down and eliminating testosterone and inhibiting the production of leutinizing hormone through the pituitary gland, which in turn inhibits or prevents the production of testosterone. Because testosterone is associated with sexual arousal, the use of these agents generally results in a reduction of sexual arousal. This reduction in sexual arousal is assumed to also reduce the motivation for sexually offending in individuals predisposed to such behaviors.
- Some research suggests that offenders treated with antiandrogens, when compared to those who have not received such treatment, have lower rates of detected sexual recidivism as well as decreased sexual arousal in response to offense-specific stimuli by self-report and physiological evidence (e.g., Maletzky, Tolan, & McFarland, 2006; see also Briken & Kafka, 2007). However, there is also evidence that offenders treated with hormonal agents alone show similar rates of sexual recidivism following a standard course of pharmacotherapy and follow up than their non-hormonally-treated counterparts (e.g., Maletzky, 1991; McConaghy, Blaszcynski, & Kidson, 1988). In all, well-designed control studies are lacking, and more empirically-rigorous research is needed in this area.
- The use of antiandrogens carries negative and punitive connotations (i.e., linked with the idea of “castration”), and testosterone-lowering agents have significant medical side effects (e.g. breast enlargement or swelling, weight gain, blood clots, depression, gallstones, diabetes mellitus, osteoporosis, hot flushes). As a result, individuals may be prone to decline such treatments, or to demonstrate later non-compliance after initially agreeing to a treatment regimen.
- The limited outcome data on all testosterone-lowering agents make definitive treatment recommendations premature. Because of significant side effects, the prescription of such medications should be restricted to paraphilic patients and sexual offenders with an at least moderate or high risk for hands-on sexual offenses. Additionally, because other etiologies and risk factors are present, the use of hormonal agents should be combined with empirically-supported psychotherapy practices (Briken, Hill, & Berner, 2003).

Non-hormonal agents for managing sexually abusive and paraphilic behaviors
- Studies of sexual offenders, men with paraphilias, and those with nonparaphilic expressions of ‘hypersexuality’ suggest that mood disorders (dysthymic disorder, major depression, and bipolar spectrum disorders), certain anxiety disorders (especially social anxiety disorder and childhood-onset post-traumatic stress disorder), psychoactive substance abuse disorders (especially alcohol abuse), Attention-Deficit/Hyperactivity Disorder (ADHD), and neuropsychological conditions (e.g. schizophrenia, Asperger’s syndrome and head injury) may occur more frequently than expected in sexually impulsive men, including sexual offenders (for example, Kafka, 1994, 1998, & 2002).
- Empirically established effective pharmacological treatments for mood disorders, ADHD and impulsivity are well documented. These conditions affect prefrontal/orbital frontal executive functioning and are associated with impulsivity; therefore, amelioration of such conditions could certainly affect, if not markedly ameliorate, the propensity to be sexually impulsive.
- Though much evidence exists demonstrating the efficacy of these treatments for other Axis I disorders, few empirical studies have examined the role of these interventions in the reduction of sexual arousal or sexual aggression. One retrospective study reported significant reduction in paraphilic activity among participants (Kraus, Strom, Hill, et al., 2007), all of whom had received Selective Serotonin Reuptake Inhibitor (SSRI) medications and psychotherapy.
- Literature supporting the prescriptive use of the mood stabilizers such as limbic anticonvulsants and atypical neuroleptics for sexual offenders is lacking. There have also been sporadic case reports of the prescriptive use of naltrexone for adults with ‘compulsive sexual behavior’ (Raymond, Grant, Kim, & Coleman, 2002).
- Despite there being no double-blind placebo-controlled treatments of the efficacy of SSRIs for the treatment of sexual offenders, such medications have been reported to be the most commonly prescribed agents for sexual offenders (i.e., 50.3% of community and 55.3% of residential programs in the United States, and 47.4% of community and 75% of residential programs in Canada, treating adult male sex offenders prescribe clients such medications), at least in the United States and Canada (McGrath, Cummings, Burchard, Zeoli, & Ellerby, 2010).
- As is the case with hormonal agents, the prescriptive use of nonhormonal pharmacological agents to treat sexual offenders will not address all etiologies and risk factors and should therefore be combined with psychotherapy specific to sexual offenders.

Ethical Considerations
- Research support for the effectiveness of pharmacological treatments such as testosterone-reducing agents is mixed. Without clear data regarding the efficacy of such treatments, providers should be sure to balance the risks of such interventions with the potential benefits of treatment.
Available medications for antiandrogen therapy often cause significant negative side effects for the men taking them, including metabolic changes, fatigue, gastrointestinal problems, cardiovascular problems, bone loss, and headaches (Giltay & Gooren, 2009). In addition to these systemic effects which may compromise an offender’s health, these medications may additionally contribute to increased depression and mood instability, which have been identified as potential dynamic risk factors for actually increasing risk of sexual recidivism (e.g., Hanson & Harris, 2000). Similarly, the reduction of sexual drive may contribute to difficulties in forming healthy intimate relationships, and these support systems may be necessary to improve quality of life and reduce the risk of continued sexual violence. While the use of other, non-hormonal agents may produce less aversive side effects than those associated with hormonal agents, side effects are still a concern and may impact the decision to use such interventions.

Access to these specific forms of treatment may be limited for some offenders, either due to cost or the availability of qualified medical professionals with expertise in the use of such medications, particularly with individuals with paraphilias or problem sexual behaviors. Whenever possible, physicians should be included as a part of the treatment team.

As noted above, due to unpleasant side effects and other complaints, there is often compliance problems among those selected to take antiandrogen medications. Not only must providers consider medication refusal, but also the potential use of illegally-obtained anabolic steroids or other hormonal agents to counteract the reduction of androgens or the use of Sildenafil Citrate (Viagra), Tadalafil (Cialis), or other comparable medications to increase sexual response. Further, providers may be pressured to administer such medications involuntarily, adding legal and ethical conflicts for prescribing physicians and their clients.

The benefits and potential risks of many antiandrogen medications such as medroxyprogesterone acetate have not been evaluated by the U.S. Federal Drug Administration as treatment for adult males or as treatment for controlling sexual behavior. Thus, the immediate and long-term impact of these medications on adult male sexual offenders has not been thoroughly tested and remains unknown. And in some jurisdictions or agencies, the off-label usage of pharmacological interventions is strongly discouraged. Insurance companies may be less likely to reimburse for off-label medication usage as well, thus increasing the cost of treatment compliance.

The use of antiandrogen medications to reduce sexual drive and consequently sexual behavior could be classified as a form of chemical restraint, a practice which is generally used to describe efforts to sedate or restrict freedoms of psychiatric patients. However, this definition could be expanded to include use of specific hormonal agents to restrict sexual freedoms and behaviors. The use of such chemical interventions – particularly involuntarily – as forms of restraint carry a negative ethical connotation and may be illegal in some jurisdictions. Further, in some agencies involving individuals with intellectual and developmental disabilities, policies exist which prohibit the limitation of sexual behaviors and freedoms of these persons (resulting as a reaction to prior efforts to sterilize or otherwise control the reproductive behaviors of such individuals), and the use of such medications may in fact violate these policies.

Conclusions

A variety of pharmacological interventions, both hormonal and non-hormonal, are used with adult sexual offenders, though only limited empirical research has been conducted regarding the use and effectiveness of these medications as preventive strategies for continued sexual aggression in paraphilic offenders. Preliminary evidence suggests that these may be effective interventions for reducing paraphilic sexual arousal and associated sexual offending.

When pharmacological intervention is utilized, physicians should be included as a part of the treatment team.
Pharmacological treatments should not be used as ‘stand alone’ interventions, and are ideally combined with other therapeutic treatment modalities, most commonly cognitive–behavior based treatments, along with community based interventions and supervised probation or parole. These treatments show promise as one significant aspect of sexual offender management.

References

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1 This Fact Sheet is based in part on information contained in the article, “Pharmacological treatments for paraphilic patients and sexual offenders,” by Peer Briken and Martin P. Kafka, in *Current Opinions in Psychiatry* (2007) 20. 609-613.
This Fact Sheet only addresses issues related to the use of pharmacological interventions with adult sex offenders. Effective interventions and best practices for adolescents will be addressed in forthcoming publications from ATSA (see for example, the policy paper entitled, Adolescents Who Have Committed Sexually Abusive Behavior: Effective Policies and Practices, and the Practice Guidelines for Adolescents). Treatment providers should use caution if considering the use of hormonal or even non-hormonal treatments with adolescents who have committed sexual offenses. These individuals may be more susceptible to the side effects of these medications, and due to developing physiology may respond to these interventions in a more unpredictable and idiosyncratic manner.