

Chemical Castration for Sexual Offenders: Physicians' Views

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For the first time in Asia, in July 2011, Korea introduced using chemical castration on sexual offenders. Under the current law, perpetrators of sexual crimes against minors aged less than 16 yr are subject to chemical castration. There have been growing calls for tougher punishment against sexual offenders and stronger preventive measures in the aftermath of a series of violent crimes victimizing women and children. Recently, a Cabinet meeting approved a revised bill, under which Korea will expand chemical castration to include those convicted of sexual crimes against minors under age 19, and retroactively apply the laws governing sexual offender personal information disclosure.

Using hormonal drugs to reduce sexual violence recidivism is known as chemical castration. The first reported attempt of hormonal manipulation to reduce pathological sexual behavior occurred in 1944, when diethylstilbestrol was prescribed to lower testosterone levels (1). Medroxyprogesterone acetate and cyproterone acetate have been used throughout the United States, Canada, and some European countries to diminish sexual fantasies and sexual impulses in sexual offenders (2). A more recent and promising development in the treatment of paraphilias is using luteinizing hormone releasing hormone (LHRH) agonists such as leuprolide acetate and goserelin. In 1996, California became the first state in the United States to authorize the use of either chemical or surgical castration for certain sexual offenders who were being released from prison into the community. This legislation was extremely controversial at the time (3); however, eight additional states have subsequently passed laws that provide some form of castration for sexual offenders under consideration for parole or probation. Currently, similar debates on the legislation and expansion of chemical castration have taken place in Korea.

Testosterone is the major hormone associated with libido and sexual function, and several studies have reported that violent sexual offenders have higher levels of androgens than do nonviolent comparison groups and androgen levels correlate positively with both prior violence and the severity of sexual aggression (4-6). However, a clear cause-and-effect relationship

between testosterone levels and sexual offending remains uncertain (7). Nevertheless, various comprehensive theories of sexual offending have incorporated hormonal factors despite surprisingly little evidence (8), and both surgical and chemical castration undoubtedly reduce sexual interest, sexual performance, and sexual reoffending (9).

Surgical castration reportedly produces definitive results, even in repeat pedophilic offenders, by reducing recidivism rates to 2% to 5% compared with expected rates of 50%. Chemical castration using LHRH agonists reduces circulating testosterone to very low levels, and also results in very low levels of recidivism despite the strong psychological factors that contribute to sexual offending (10). Chemical castration has some advantages over surgical castration. First, although chemical castration is potentially life-long for some offenders, it might allow sexual offenders to have normal sexual activity in context with psychotherapy. Second, some sexual offenders may voluntarily receive chemical castration. Third, chemical castration may be a more realistic restriction than electronic ankle bracelets or surgical castration. Fourth, unlike surgical castration, the effects of anti-libido medication are reversible after discontinuation. Finally, the general public may feel relieved knowing that sexual offenders are undergoing chemical castration.

Nevertheless, there has been an ongoing debate about chemical castration for a variety of social and medical reasons. Social problems include that chemical castration may not guarantee human rights for involuntary cases performed without informed consent of the sexual offender, and thus may be regarded as only punishment and not treatment. Chemical castration has been executed without informed consent in Korea and in three states of the United States (2). Additionally, increasing the population of sexual offenders who undergo chemical castration will create tremendous socioeconomic burdens. It costs 5 million won (USD 4,650) per person annually for medication and monitoring when leuprolide acetate injections are administered every 3 months in Korea.

Medical considerations are also important, and contemporary doctors should be knowledgeable of these issues. First, chemi-

cal castration is no longer effective after it is discontinued; therefore, the spontaneity for receiving medication is prerequisite to overcoming this limitation. World Federation of Societies of Biological Psychiatry guidelines suggest that combined psychotherapy and pharmacological therapy is associated with better efficacy compared with either treatment as monotherapy (10). Furthermore, as we have experienced in treating prostate cancer, chemical castration may have serious side effects. Drugs such as medroxyprogesterone acetate, cyproterone acetate, and LHRH agonists, when administered for chemical castration, can induce a significant decline not only in serum testosterone but also in estradiol. Estrogens play an important physiological role even in men because they have beneficial effects on skeletal growth and bone maturation, brain function, and cardiovascular biology. Therefore, chemical castration is associated with various side effects, including osteoporosis, cardiovascular disease, and impaired glucose and lipid metabolism (11). Depression, hot flashes, infertility, and anemia can also occur. Given that the minimal duration of treatment is 3 to 5 yr for severe paraphilia when a high risk of sexual violence exists (10), the side effects of chemical castration can increase in a time-dependent manner.

Sexual crimes are a significant public health problem, efforts to prevent recidivism and protect the community are worthy, and public safety can take precedence over criminal's rights. Chemical castration reduces recidivism effectively when offered to sexual offenders within the context of simultaneous comprehensive psychotherapeutic treatment. However, chemical castration under the current laws is vaguely positioned between punishment and treatment due to lack of informed consent by the recipient, and so remains a problematic issue for medical ethics. Therefore, physicians are obligated to very closely monitor any potential treatment complications in sexual offenders undergoing chemical castration.

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