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## CHAPTER 24

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# Chemical Castration

### *Treatment for Pedophilia*

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**ERIC, NOW AGE 37, HAS BEEN** a patient of ours for over 20 years. At the time of the initial evaluation, he was age 17 and had been referred to us from a local hospital for treatment of pedophilia. His case is being presented as an illustration of a young man with extraordinary motivation and courage in his long struggle with pedophilia and as someone who has been helped a great deal in this struggle over the last 10 years by antiandrogen medication therapy.

## HISTORY

Eric had a troubled childhood. The product of an unwanted pregnancy, he was placed in foster care immediately after birth where he was sexually and physically abused. He was eventually adopted by another family at age 5, where he was also abused. Due to problems that occurred during his delivery, he experienced developmental delays in walking and speaking. His intelligence testing revealed an IQ of 80. Eric was placed in special classes and finished school through the tenth grade.

Eric's inappropriate sexual behavior began at a very young age. From age 5 to 10 years, Eric repeatedly exposed his genitals to his peer-aged adoptive cousins, both male and female. Eric started puberty at age 12; at age 13 he began sexually abusing his younger adoptive brother, age 2 years. This continued repeatedly for 3 years and consisted of fondling his brother's buttocks and performing oral sex on him, at times masturbating to ejaculation during these episodes. This was discovered when Eric reported it to a school counselor, apparently out of guilt. Child Protective Services investigated and reported to the authorities and a decision was made not to prosecute if Eric was admitted to a psychiatric hospital, which occurred when Eric was age 16.

After being hospitalized for 8 months, Eric was discharged to home, where he promptly sexually abused his adoptive parent's biological daughter, age 2. This abuse consisted of fondling her genitals while masturbating to ejaculation. He was arrested, pled guilty, and was sentenced to a juvenile lock-up facility for 3 years, where he sexually abused a 14-year-old male inmate (too impaired to give consent) by performing oral sex on him. At that time, in 1985, specialized therapy was not available in Eric's community and so, at age 17, he was referred to us for an evaluation and consultation.

Prior to beginning our evaluation, we discussed with Eric the limits of confidentiality, indicating that we were mandated to notify child protective services if he disclosed any current abuse of a child. We also in-

licated to him that he should not mention specifics of prior sexual abuses that were currently unknown to the authorities in a way that could lead to his identification and prosecution.

## DIAGNOSIS

During our evaluation, Eric, then age 17, reported that for the past several years he had experienced intense recurrent sexual fantasies, urges, and behaviors involving sexual activity with both male and female children of various ages. Eric also disclosed several past victims unknown to the authorities in addition to those already known.

Our evaluation consisted of interviews, psychometric testing, and objective measurement. Eric underwent penile plethysmography, a procedure in which a male's erectile response is measured as he is presented with a variety of visual or auditory stimuli. The results indicated Eric had significant responses to stimuli involving young children, both male and female, but had a much stronger arousal to young boys. He had much less of a response to teenage and adult males and females.

During the evaluation, Eric also reported for the first time that his foster father had sexually and physically abused him between the ages of 3 and 5 years, once or twice per week, by tying him to a bed and forcing him to place his mouth on his penis. Eric's foster father also engaged in anal penetration, which on one occasion required Eric to have rectal stitches. Eric disclosed that his adoptive mother would routinely beat him with a yardstick, force him to bathe in bleach and on one occasion gave him a black eye. He was also physically abused by his adoptive father by being thrown against a wall, which resulted in a fractured arm, and by being hit on the head. Various studies suggest a high number of child molesters were themselves the victims of child molestation (Finkelhor 1986), and this has been thought to often have etiologic significance. Often male patients who have been sexually abused are exceedingly reluctant to disclose their own abuse, as was the case with Eric. He also reported nightmares and frequent intrusive memories of his own sexual abuse.

Eric also had moderate symptoms of depression that did not fulfill full criteria for a major depressive episode. Because Eric was an adolescent, we decided not to diagnose him as having pedophilia but instead indicated that he had inappropriate sexual interest in young boys and girls. (Because there is no known "cure" for a paraphilia, a patient will carry such a diagnosis throughout his or her life and therefore we are conservative in giving this diagnosis to teenagers. Adolescence is a time of sexual experimentation, and sexual behaviors and interests can change.)

As an adult, however, Eric's sexual interests did not change and we made the following diagnoses: pedophilia, depressive disorder not otherwise specified, posttraumatic stress disorder, and borderline intellectual functioning.

## TREATMENT

### Cognitive-Behavioral Treatment

Despite his history of molesting children, Eric had an ingratiating and sympathetic quality and a capacity to find caregivers who would look after him. One such caregiver, a psychologist, took an interest in Eric and expressed an interest in learning about cognitive-behavioral therapy (CBT) treatments of sex offenders; subsequently, he and Eric read about CBT modalities used with this population. These modalities were first developed under a National Institute of Mental Health grant to assess and treat child molesters; a manual describing the use of CBT techniques with this population was developed through research (Abel et al. 1984). Some of these techniques are described briefly below.

Eric continued to be hospitalized for the next several years in his local hospital, but he and his psychologist consulted and periodically met with us to receive an assessment and further instruction in CBT treatment. For a year, Eric used these techniques in his local hospital. For example, he learned and used masturbatory satiation, a technique that taught him to use his deviant fantasy postorgasm in a repetitive manner to the point of satiating himself. This treatment is self-administered, tape recorded, and checked by a therapist. Patients find that by masturbating with the deviant fantasy in mind in a repetitive way after ejaculation has occurred, the deviant fantasy is reduced or even becomes boring or repulsive (Abel et al. 1992).

Eric also learned covert sensitization, a technique that involves having the patient imagine various feelings or behaviors that precede a deviant fantasy or behavior and then immediately bring to mind aversive images and negative consequences. This sensitizes the patient to the onset of deviant urges to disrupt the pattern and pair antecedent emotions or behaviors with negative consequences. For example, in one session, Eric described being at home, feeling lonely, and subsequently molesting his landlord's son who had knocked on his door. Eric was then asked to pair these feelings and behaviors with an aversive consequence, such as his landlord walking in, finding him with the landlord's son, and calling the police. This had the aim of helping him recognize and interrupt the urge to abuse a child.

Eric also received instruction in sexual education, cognitive restructuring (a process of confronting and correcting rationalizations that sexual abusers use to justify and maintain their behavior, such as the notion that having sex with a child is a good way for an adult to teach a child about sex), social skills and assertiveness training, and relapse prevention (a self-control program taught to offenders to help them anticipate and cope with high-risk situations that lead to relapse and then to develop strategies to avoid these situations). For example, he was taught to avoid situations that would bring him into the proximity of children, such as schools or playgrounds, and never to be alone with a child, with instructions to leave a room if a child entered it. These are standard CBT techniques that are used to treat paraphilias (Abel et al. 1992).

Most individuals with paraphilias are difficult to treat because they deny their sexual interests, have little or no motivation to change, and seek evaluation and treatment only because of a court mandate. In the case of Eric, we were elated that we finally had a patient who admitted his crimes and his problem, wanted to change, and was remorseful for his previous actions. This dynamic helped him in that we became and remain involved in his treatment despite infrequent contact and his distant location from us.

Two years later, at age 19, Eric was again discharged to live in an apartment complex, but promptly sexually abused his landlord's 14-year-old son by performing oral sex on him. He informed his case manager and was again hospitalized. Eric then remained in a psychiatric hospital for the next 6 years. He practiced behavioral treatments and was seen periodically in consultation by us. He continued to report sexual fantasies about and high arousal toward children as well as toward adults. Both hospital authorities and Eric were fearful of his lack of control and the likelihood that he would continue to victimize children should he be released into the community.

Many individuals with paraphilias try to control their behavior; some succeed but many do not. Although there is no cure for pedophilia or for any sexual preference, because such sexual interests or preferences are extremely difficult to modify, the CBT and relapse-prevention techniques described earlier have as their goal helping individuals reduce and control unwanted sexual impulses and avoid relapse. For some patients, these techniques work well, but for others, even with the best of intentions, they fail. In this regard, these patients are not dissimilar to those who abuse alcohol or other substances and have the best of intentions on discharge from the hospital to refrain from substance use but are unable to control their choices once in the community.

Eric's attempts to control himself were quite remarkable in that de-

spite numerous failures and adverse consequences, he refused to give up. Most patients with pedophilia find their atypical sexual interest and behaviors to be quite pleasurable and ego-syntonic and are extremely reluctant to relinquish them. Indeed, many never do. For others, as with substance addictions, it takes a series of negative consequences to bring them to a point of deciding that they should relinquish such interest and behavior and make their elimination a target of therapy. Earlier in his career, Eric had had many victims and had developed "grooming" routines to acquire victims (i.e., behaviors that sex offenders develop, such as befriending children to gain their confidence and set them up to be victimized later). However, he eventually found that such behavior was ultimately associated with extremely negative consequences (in his case, his chronic confinement to psychiatric facilities), and thus he became motivated to control his behavior.

During the next 6 years, while hospitalized, Eric, through his own efforts and those of his mental health attorney, became aware of "chemical castration" or antiandrogen treatment. He had approached his local hospital caregivers repeatedly for treatment with antiandrogens, but they had indicated that they had no knowledge of or expertise involving these agents and were unwilling to administer them. Finally, Eric initiated a lawsuit to force the hospital to treat him with antiandrogens. To avoid the consequences of the lawsuit, the hospital authorities agreed that Eric be transferred to a hospital where we could evaluate him for antiandrogen treatment.

### Initiation of Antiandrogen Treatment

Eric was evaluated for antiandrogen treatment at age 27 in an inpatient setting. This evaluation consisted of a thorough psychiatric history, physical examination, intelligence and neuropsychological testing, a computed tomography scan, karyotyping (which had not been previously done to evaluate his mild mental retardation), a complete blood count, blood chemistries, a urinalysis, and an electrocardiogram, all of which confirmed that he had no unrecognized medical illnesses or contraindications to antiandrogen therapy. The main contraindication to antiandrogen therapy with gonadotropin-releasing hormone (GnRH) analogues is a history of hypersensitivity to GnRH, GnRH agonist analogues, or any of the excipients in the particular preparation used. (The use of GnRH analogues here is described for male patients only. We are not aware of any use of GnRH analogues for this indication in female patients, and the possibility of pregnancy while a female patient is receiving this drug is a contraindication to its use.) In our practice, we also

perform a bone density evaluation of patients to assess for the presence of osteopenia (a condition of decreased bone mineralization and density that is a precursor to osteoporosis) or osteoporosis. These entities are relative contraindications, as GnRH agonists can create or worsen them; evaluation and treatment of these disorders might be required before GnRH agonists are administered.

Although several antiandrogen agents are available, a decision was made to use depot leuprolide acetate, which is one of several available GnRH analogues. These agents have been widely used in general medicine for 20 years, principally to reduce sex hormones in patients with cancers that are sensitive to them (e.g., prostate cancer), for various gynecological indications (e.g., endometriosis), or to treat the premature onset of puberty by reducing puberty-related sex hormones. GnRH analogues have the advantage that they can be administered as a depot injection. Various time-release preparations are available that have a duration of action of 1, 3, 4, and, more recently, 12 months.

GnRH analogues work by reducing the release of luteinizing hormone (LH) and follicle-stimulating hormone from the anterior hypothalamus. LH drives production of testosterone by the Leydig cells in the testes; GnRH analogues reduce LH release, which in turn reduces testosterone to essentially castration levels. Concomitant with the reduction in testosterone, there is a reduction in sexual drive and sexually motivated behavior. Side effects are more modest than with earlier available agents, such as estrogen or progesterone, and include mainly hot flashes and hypogonadism (a generic term referring to loss of libido, diminution of an ability to have erections and ejaculations, and a decrease in testicular size and ejaculate volume). It is also important to note that for about the first 2 weeks after the initiation of such therapy, there is a testosterone surge that can be associated with hypersexuality; to prevent this, Eric was treated with flutamide, an antiandrogen, for his first month of therapy. Others have not taken this precaution and reported no problem with initial hypersexuality (Rosler and Witztum 1998). Caution should be exercised in the use of flutamide as it has many side effects, including hepatotoxicity (fatal hepatic necrosis has been reported with this medication). As for all medications discussed in this case, the manufacturer's product labeling and description should be consulted for details and new information.

Within a month, Eric was delighted with the results of this medication. He reported that before the medication, if he saw a child, he rated his control over his sexual urges or behavior at 15% (with 0% representing no control and 100%, total control). He stated that after being on the medication for a month, he felt as though a weight had been lifted from



his shoulders and reported 100% control over his behavior. He also reported that before the medication he had an ejaculatory frequency of 14–21 times per week and had sexual thoughts all day long. After receiving the GnRH medication, he reported having 0–1 ejaculations per week and only infrequent sexual thoughts.

Eric was also diagnosed during this hospitalization as having a borderline personality disorder. In fact, he had a history consistent with this diagnosis, with numerous suicidal gestures and attempts, a tendency to be overly dramatic and to exaggerate, and emotional lability, among other things.

### Outcome and Follow-Up

We have seen Eric every 2 years since his antiandrogen treatment was initiated. After being on leuprolide acetate for 5 years, Eric was found at age 32 to have developed mild osteopenia (men require testosterone to maintain bone mass just as women require estrogen for the same purpose). This was not recognized in the literature as a significant risk at the time that he was initially treated, but has subsequently been reported in many populations. A recent article has discussed the increased fracture rate in men treated with GnRH agonists (Shahinian et al. 2005).

Eric was started on alendronate sodium, which inhibits bone resorption, and his bone demineralization stopped and then improved. Eric has been followed by his local medical doctor who prescribes the alendronate, measures his testosterone levels, and performs bone density evaluations every year. Eric's testosterone levels have continued to remain low and his osteopenia has improved. Eric initially gained approximately 70 lb over a several-year period (one of the side effects of antiandrogen therapy is weight gain) but has recently lost 40 lb.

For the past 10 years that Eric has been on leuprolide acetate, he says he has continued to have "100% control" over his sexual impulses. He reports that he has not sexually abused anyone since he has been on leuprolide acetate, and there are no reports or suggestions that he has had any other victims. He reports that he has had several girlfriends with whom he has been sexual, inasmuch as he has had an erection and engaged in sexual intercourse, but he has been unable to have an ejaculation for several years. He was discharged from the hospital and has lived in several halfway houses. He has been rehospitalized several times, not for issues of sexual acting out but instead for being suicidal or physically threatening a girlfriend.

Eric continues outpatient therapy at a local mental health clinic and

intermittently in structured work or activity situations. Other medications, including various antidepressants, mood stabilizers, and antipsychotics have been tried to treat his mood lability and other aspects of his borderline personality disorder, but have had no significant effect.

Aside from his hospitalizations and progression to discharge, Eric has not had any restrictions on his activity for several years. He continues to receive his leuprolide acetate and is now receiving an injection every 4 months. He reports that he is grateful for this medication and says that he intends to remain on it for the rest of his life. He says that it has saved him from a life of inpatient hospitalization and from victimizing other children. He reports that he has no sexual interest in children, a claim that we have found to be believable. He says that he may notice a child now, but that he is not drawn to him or her. Eric has not found the need to engage in behavioral treatments for many years; sex offender-specific group treatment, which is indicated for patients like Eric, is still not available in the area in which Eric lives, so leuprolide acetate is the main modality of treatment.

## DISCUSSION

Eric initially presented as an adolescent who had sexually abused several young children. Although many clinicians will react with revulsion to such a person, Eric has a personality that is likeable and engaging. He was also a sexual and physical abuse survivor and has coped with severe social, intellectual, and psychological limitations. He had not actively chosen to become sexually attracted to children but instead found himself drawn to them and unable to control his urges to abuse them or impaired peers. This behavior and attraction became very ego dystonic and he sought help for his pedophilia. All of these factors engendered positive feelings on our part toward him.

Another aspect of our motivation in working with Eric has been that the treatment of pedophilia, when successful, results in less victimization. Although many in our society are of the opinion that pedophiles should be kept away from society indefinitely, there is a huge cost to warehousing such individuals, and effective treatment is available for some individuals, such as Eric (Fagan et al. 2002).

Eric has had a long and difficult struggle and has so far succeeded in controlling his impulses. We are respectful and admiring of his strength in the face of many limitations, as is the psychologist who has continued to work with him for 20 years. We have been very gratified by Eric's response to leuprolide acetate. We receive periodic letters from

him that update us as to his life and in which he reports his various successes and failures, and we look forward to these letters and to our periodic meetings.

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