Should a sexual offender be allowed castration?

A 59 year old man with a persistent history of sexual abuse of children has requested castration to stop himself from reoffending. Dr Malcolm Alexander presents the man's case and highlights some of the ethical issues, and three psychiatrists and a lawyer comment on the request.

Ethical considerations in using orchidectomy for social control

Malcolm Alexander

Mr K is a 59 year old man with a long history of persistent sexual abuse against children. His abusive behaviour began when he was at school and continued into his marriage. He abused his own children, and, despite many periods of imprisonment, he continued to abuse children each time he was released. His last period of imprisonment was for 10 years.

During that last period in prison Mr K became determined to end his abusive behaviour and formed the idea that orchidectomy would solve his problem by curtailing his sex drive. He petitioned the prison doctor to this end and received his support. After his release Mr K was referred to a psychiatric hospital and admitted for assessment for several months.

While he was in hospital Mr K was offered chemical castration using goserelin but refused this because he regarded it as a temporary and incomplete solution. He wants a permanent solution to stop his abusive behaviour so that he can start to live a normal life. He is convinced that the operation will work and liberate him from his condition, which he compares to that of being a "leper." He feels desperate for surgery and threatens suicide. To support his campaign for castration Mr K has been on a hunger strike and has also contemplated castrating himself.

The issue of consent has also been carefully considered and the view has been formed that Mr K is capable of using his judgment to come to a sound opinion. The Mental Health Act Commission has concluded that Mr K's ability to give consent is fundamental and that in addition the opinion of a number of experts should be sought and a decision made on the basis of the consensus view.

When Mr K discusses the impact of abuse on his victims he freely admits that "it ruins a child's life," but he claims not to be aware of the long term consequences and psychological damage that abuse of children may have when the child grows up into an adult.

Mr K's obsession with castration sits oddly in a culture that is committed not to use surgery to change or alter behaviour—perhaps with the exception of oophorectomy and hysterectomy in women with severe premenstrual tension and for people having sex changes. A surgeon might be convicted for assault should he or she perform this operation unless a body of medical opinion supported the surgeon's decision to operate.

Mr K has perhaps another 20 years in front of him. I wonder whether the indecisiveness of the medical establishment will create a living hell for dozens more children, while it refuses to accept Mr K's own, extreme, solution. Instead the clinicians offer the uncertainty of goserelin, a treatment he rejects and which is therefore unlikely to work. The other alternative is

imprisonment, a just solution if he reoffends but which does not face up to the need for our society to develop effective strategies to prevent child abuse or to treat persistent offenders when they are released from prison.

There is no dilemma for Mr K, who feels that castration is a perfect answer for himself and society. There is no known "cure" for the obsessive abusive behaviour he displays, and, despite Mr K's strongly held view about castration, society has rightly drawn fairly clear boundaries that distinguish between therapeutic surgery and mutilation. If a body of medical opinion supported Mr K might it become a dangerous precedent for acts of mutilation to be carried out at the behest of the courts or even the media? On the other hand, perhaps the solution is simply to comply with the wishes of a dangerous individual who passionately wishes to change himself and protect society.

Castration is not the answer

John Gunn

Mr K presents a difficult problem. He is clearly distressed and probably at risk of suicide. Neither his plight nor his presentation are unique. In my view the permanent castration of Mr K should not be considered. There are three general reasons and some points specific to his case.

Firstly, the follow up results after such surgery have been conflicting. The strongest advocate of such treatment was Stürup.¹ Even he acknowledged that some patients had a poor outcome, some 2-3% continuing to offend, and another 2-3% killing themselves. Heim found that of 35 sex offenders castrated in West Germany 11 were still able to engage in sexual intercourse.² Although there was evidence of a reduction in sexual drive after castration, he suggested that it might be a myth that sexual capacity was extinguished. Some patients went on also to take an antiandrogen (cyproterone acetate). Perhaps this is not surprising since androgens are secreted by the adrenals as well as by the testes. The experimental and physiological basis for the operation is unclear.³ One remarkable aspect of the sparse literature on this topic is the lack of any attempt to undertake a controlled study.

Secondly, castration, which was widespread in Europe earlier this century, is not now performed in any western European country. Its demise was partly related to the conflicting results but more strongly to ethical objections. The operation is mutilating and it has the distinct risk that it could be carried out coercively. In the United Kingdom it is unlikely to be accepted as legal as a treatment for a sexual disorder. The Mental Health Act 1983, in conjunction with regulation 16 of the Mental Health (Hospital, Guardianship, and Consent to Treatment) Regulations, requires the approval of a second doctor for psycho-surgery and hormonal implants. No doctor could

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safely proceed with the more drastic procedure of permanent castration without seeking the advice of the Mental Health Act Commission. The commission is unlikely to agree to such an operation. A determined psychiatrist could test this view for Mr K, but the almost inevitable rejection after weeks of medical and legal argument could make Mr K's mental health much worse.

A third reason for not contemplating castration is a practical one. An antiandrogen, cyproterone acetate, is available. If taken in adequate dosage this always reduces serum testosterone concentrations. The usual route is oral, but a depot preparation can be given on a named patient basis. If the treatment produces sufficient behavioural change then surgery is clearly unnecessary; if it does not then castration will not either.

There are other powerful clinical reasons for not contemplating surgery in this particular case. Mr K has talked of suicide, a known hazard in castration surgery. Effective, but reversible, chemical castration is available. It has been offered to Mr K in the form of goserelin, though this drug is not licensed for this purpose. Mr K has refused antiandrogen medication, which suggests that his motivation for castration is complex and certainly cannot be taken at face value. It needs a good deal of discussion to unravel the dynamics of the apparently paradoxical position he is taking. The symbolism of castration needs to be explored with him, as do the possible underlying motives for his seeking such surgery—for example, guilt and problems of sexual identity. We do not have much information about his personality structure, but this may be more generally damaged and require treatment as well.

Mr K needs a lot of treatment. He may need admission to hospital to reduce his anxiety and protect him from suicidal urges. He certainly needs to build a long term relationship with a psychiatrist who can explore his complex feelings about his sexuality, his offending, and his apparently ambivalent desire for castration. Such a psychiatrist would be able to offer and monitor cyproterone acetate medication when he is ready for it. He may also need behaviour therapy for his deviant sexual desires and other medication to reduce his anxiety; chlorpromazine and haloperidol, for example, are effective anxiolytics with the side effect in some people of reducing libido. The key to effective treatment will be long term management by a psychiatrist he trusts.

1 Stürup GK. *Treatment of sexual offenders in Herstedvester Denmark, the rapists*. Copenhagen: Munksgaard, 1968.

2 Heim N. Sexual behaviour of castrated sex offenders. *Arch Sex Beh* 1981;10:11-9.

3 Freund K. Therapeutic sex drive reduction. *Acta Psychiatr Scand* 1980;62 (suppl 287).

There is a place for surgical castration in the management of recidivist sex offenders

D A G Cook

This case raises issues which are both complex and emotive. First is the general question of the value of physical treatments in managing persistent sexual offending. Second is the question of whether orchidectomy has any part in that management and, if so, under what circumstances. Finally, there are legal issues about the nature of informed consent which provide a protective framework for both patients who receive and doctors who offer controversial treatments.

The use of chemical agents to suppress libido in sexual offenders who are judged to be at risk of committing serious crimes is an established practice provided that the offender gives his consent. The three agents most commonly used are cyproterone acetate (a synthetic antiandrogen given orally), medroxyprogesterone acetate (a progestogen given intramuscularly), and goserelin (a synthetic luteinising hormone releasing hormone given subcutaneously). All these can be highly effective in suppressing libido, although none are without side effects, particularly at the doses that may be required.

In Denmark surgical castration was a common treatment for serious sexual offenders until 1972. Several studies have shown that reoffending was dramatically reduced.^{1,2} However, offending is not eradicated completely and a few castrated men still experience significant sexual desire and retain the ability to have an erection. Broadly speaking, the effects of surgical castration on libido are comparable to those that can be achieved by chemical means.

"Surgical castration does not remove all responsibility from him"

Furthermore, surgical treatment can produce similar, though possibly less severe, side effects.

A recent study on the treatment of prostatic cancer suggests that a maximal reduction of libido might be achieved by combining an antiandrogen with either a luteinising hormone releasing hormone agonist or surgical castration.³

When psychological and behavioural programmes have failed and when chemical suppression of libido has been unsatisfactory, most commonly because of unacceptable side effects, there may be a case for surgical castration. Castration is not a panacea, however, and an antiandrogen could be added if troublesome sexual feelings remained. There is no overriding clinical reason to proceed to surgery without first trying the chemical suppressants.

If a patient for whom surgical castration was proposed suffered from a mental disorder (sexual deviancy is specifically excluded from the category by the Mental Health Act 1983) then it would be necessary, in addition to the recommendation of the responsible medical officer and the consent of the patient, to have a second opinion from an independent doctor appointed by the Mental Health Act Commission.⁴

In this particular case it seems odd that a man desperate for suppression of his libido will not contemplate a therapeutic trial of one or other of the chemical agents available. If he is not clinically depressed and seeking mutilation as a punishment he probably thinks castration is a total solution to his problems. Unfortunately this may prove not to be the case, but so long as he understands that surgical castration does not remove all responsibility from him for his subsequent sexual behaviour I would be inclined to support his request. The fact that he will not pursue the more orthodox course advised by his doctors testifies to his personality difficulties and suggests that even after castration he will continue to be a problem to himself, even if not to others.

1 Ortmann J. The treatment of sexual offenders: castration and antihormone therapy. *Int J Law Psychiatry* 1980;3:443-51.

2 Bradford JM. Organic treatment of the male sexual offender. *Ann N Y Acad Sci* 1988;528:193-202.

3 Rousseau L, Dupont A, Labrie F, Couture M. Sexuality changes in prostate cancer patients receiving antihormonal therapy combining the antiandrogen flutamide with medical (LHRH agonist) or surgical castration. *Arch Sex Behav* 1988;17:87-98.

4 Brahmans D. Voluntary chemical castration of a mental patient. *Lancet* 1988;331:1291-2.

An angry man let down by medical indifference

Pamela J Taylor

The most shocking thing this story suggests is that it is necessary to demand castration to attract medical attention for a sexual deviation. This is not the story of a man for whom all treatments had been tried and failed. While the odd detail may necessarily have been omitted in the telling, it seems that he has previously only been punished—and that that has certainly failed to prevent his reoffending. Medical indifference, ignorance, or open rejection in such cases is not unusual.

It is not surprising, therefore, that Mr K is very angry with the medical profession—and he is indeed angry. When there are other treatments available only a very angry man would demand of a doctor that he or she should inflict irreversible, major mutilations on him, while also attempting to make that doctor responsible for much, much worse if he or she does not.

There is no information about Mr K's early childhood, but almost certainly it set the pattern of what was to come. A typical story would be of abuse, of failure to attract nurturing from authority or parental figures. It seems that he can now deal with authority figures only if he puts them in such roles—and his insistent demand for castration is just such another example. If the medical profession were allowed to accede, could it really be in this man's interests to collude in perpetuating this cycle?

The paucity of research on which guidance on treatment could be based reflects collective medical neglect of people with a sexual deviancy. The only type of research on the effect of castration for the control of deviant sexual drive is the follow up of castrated men. There are no randomised controlled trials. Such evidence as there is would suggest that, after the first few months, castration might offer Mr K—and his potential victims—the best chance of avoiding further sexual offences in the longer term. His age might even be in his favour in this respect,¹ but it could also leave

***"The single most important issue
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him more vulnerable to serious side effects.² No one, however, has bettered the assertion by Ford and Beach that the effects of castration on male sexual drive depend mainly on the subject's psychological attitude to it.³

Thus although the Danish, Dutch, and German studies^{1,2,4} could be regarded as showing that castrated men did particularly well—because they were formerly established recidivists—we must set against that the fact that they were also exceptionally highly "motivated" for the operation.^{2,4} Ortmann presented evidence that, with similar motivation, the results of treatment with cyproterone acetate are better.⁵ Motivation for change may thus be the key, but Mr K has rejected what is probably the best approach to the control of his sexual drive. He has, it seems, also refused to consider other, psychological treatments which might eventually allow him a safe return to a healthy hormone balance.

The single most important issue for Mr K's future is whether he can ever become capable of genuine negotiations with others. At the heart of his sexual problems is this inability since, for sexual acts, he picks on those who are barely able to know their wishes, let alone express or stand by them. There are plenty of other deviant behaviours that can emerge when people do not have a full range of skills for recognising and resolving differences with others. If he is otherwise untreated the control of Mr K's sexual drive may achieve little more than raising slightly his mask on other aggression. The most immediate issue, however, is whether he can progress beyond the first tentative step towards treatment. The medical profession has a clinical and ethical duty to help him in this.

1 Heim N. Sexual behaviour of castrated offenders. *Arch Sex Behav* 1981;10:11-9.
2 Freund K. Therapeutic sex drive reduction. *Acta Psychiatr Scand* 1980;62 (suppl 287).

3 Ford C, Beach FA. *Patterns of sexual behavior*. New York: Harper, 1951.

4 Wille R, Beier KM. Castration in Germany. *Annals of Sexual Research* 1989;2:103-33.

5 Ortmann J. The treatment of sexual offenders: castration and antihormone therapy. *Int J Law Psychiatry* 1980;3:443-51.

The law is divided

John Finch

The case of Mr K raises fundamental questions relating to consent to treatment, unlawful assault, and entitlement to medical treatment. There is no easy legal solution to Mr K's predicament for several reasons.

Firstly, there is no exclusive definition of treatment for all legal purposes. Much depends on the context and purpose of the procedure offered or performed. On the one hand, deliberate mutilation with no therapeutic benefit is an assault, not treatment. On the other hand, treatment with clear therapeutic benefit but given without consent may still be an assault.¹

Secondly, although autonomy or self determination underpins the common law on consent to medical treatment, a patient's choice may be eliminated by legislative intervention or by the public policy of the courts. For example, the Prohibition of Female Circumcision Act 1985 makes it an offence to circumcise women or girls except in the case of necessary surgical operations; necessity is judged according to the patient's physical or mental health and not according to custom or ritualistic belief. Judicial policy prohibits mutilation in general for whatever motive.²

Thirdly, a patient's choice may be subjected to certain legal conditions. An example is the requirement of medical approval and certification of consent (by a doctor and two others) imposed by the Mental Health Act 1983 for psychosurgery and for the surgical implantation of hormones to reduce male sexual drive.

The implantation of hormones to reduce sexual drive is relevant to the problem facing Mr K and his doctors. An apparent alternative to orchidectomy is chemical castration by goserelin. The Divisional Court ruled in 1989 that goserelin is not covered by the requirements of the Mental Health Act on surgical implantation of hormones as a treatment for mental disorder.³ The chemically castrating effect of goserelin therefore remains a matter of simple agreement between doctor and patient, while the implantation of natural hormones, which are not as effective, involves no less than seven people (including the patient) in a complex consultation process.

In the case of treatment for mental disorder, section 118 (2) of the Mental Health Act 1983 empowers the secretary of state to allow limited consultation (one

doctor to certify both therapeutic benefit and consent) for treatments that "give rise to special concern." The secretary of state has chosen not to include goserelin in this category in the revised code of practice coming into effect on 1 November. Had she done so and chemical castration been recommended to Mr K as a treatment for mental disorder, legal recognition of special concern might have approximated such treatment to orchidectomy. But goserelin has not been included, and, furthermore, neither treatment option for Mr K is apparently directed to mental disorder. Goserelin is thus a far cry from invasive, irreversible orchidectomy. This only adds to the dilemma of patient and doctors alike.

Application might be made for a judicial declaration that orchidectomy is lawful in this case. The casuistry of such litigation depends on medical opinion of what is appropriate. The best interests approach is often taken without specifying which interests are the best or who

decides.⁴ Despite its limitations the best interests approach is in any case better suited to decisions concerning treatment of incapable patients than it is to decisions denying treatment to a patient in full possession of his mental faculties.⁵

Legislation and case law offer analogies both for and against performing orchidectomy. The decision in the case of Mr K could be made by a judge, by an ethics committee, or simply from an informal second opinion. Mr K, however, might justifiably expect his problem to be resolved not by asking why his desired operation should be performed but rather by asking why it should not if his autonomy and desire not to reoffend are to be respected.

1 *Devi v West Midlands Regional Health Authority*; Court of Appeal 7 May 1980.

2 Dworkin G. The law relating to organ transplantation (1970) 33 MLR 353, 355.

3 *R v Mental Health Act Commission, ex parte W* (1988). *Times*, 27 May.

4 *F v West Berkshire Health Authority* [1990] 2 AC 1.

5 See Law Commission. *Consultation paper No 129*. London: HMSO, 1993.

Economic Evaluation and Health Care

Cost-effectiveness analysis

Ray Robinson

This is the third in a series of articles that describes the ways in which methods of economic evaluation may be used to assess the economic costs and consequences associated with different forms of health care intervention

When different health care interventions are not expected to produce the same outcomes both the costs and the consequences of the options need to be assessed. This can be done by cost-effectiveness analysis, whereby the costs are compared with outcomes measured in natural units—for example, per life saved, per life year gained, and per pain or symptom free day. Many cost-effective analyses rely on existing published studies for effectiveness data as it is often too costly or time consuming to collect data on cost and effectiveness during a clinical trial. Where there is uncertainty about the costs and effectiveness of procedures sensitivity analysis can be used, which examines the sensitivity of the results to alternative assumptions about key variables. In this article Ray Robinson describes these methods of analysis and discusses possibilities for how the benefits of alternative interventions should be valued.

If the outcomes of alternative procedures or programmes under review are the same, or very similar, then attention can focus upon the costs in order to identify the least cost option. The method of evaluation for this—cost-minimisation analysis—was described in last week's article. If, however, the outcomes are not expected to be the same, then both the costs and consequences of alternative options need to be considered. Cost-effectiveness analysis is one method of economic evaluation that allows this to be done.

Measures of effectiveness

In order to carry out a cost-effectiveness analysis it is necessary to have suitable measures of effectiveness. These will depend on the objectives of the particular interventions under review. In all cost-effectiveness analysis, however, measures of effectiveness should be defined in appropriate natural units and, ideally, expressed in a single dimension.

Common measures used in several studies have been "lives saved" and "life years gained." Thus Boyle and colleagues, in their study of neonatal intensive care of very low birthweight babies, measured effectiveness in terms of mortality rates at the time of discharge of

newborn infants from hospital.¹ Their study compared two periods—one before the introduction of neonatal intensive care, and one after its introduction—and measured cost effectiveness in terms of additional costs per life saved. Both Ludbrook² and Churchill and colleagues³ investigated alternative treatments of end stage renal disease and measured their effectiveness in terms of life years gained. A similar measure was adopted by Mandelblatt and Fahs, who reported that the early detection of cervical cancer through Pap tests saved 3.7 years of life per 100 tests and represented a cost of \$2874 per life year saved.⁴ Oster and Epstein also used years of life saved as a measure of effectiveness in their study of antihyperlipaemic therapy in the prevention of coronary heart disease.⁵

Several other measures of effectiveness have been used by different researchers (box). These have included the number of pain or symptom free days resulting from alternative drug regimens in the treatment of duodenal ulcers⁶; the number of patients with a successful diagnosis in the case of alternative diagnostic strategies for deep vein thrombosis⁷; the number of complications avoided in the treatment of Lyme disease after tick bites⁸; and the number of episodes of fever cured and deaths prevented in the treatment of chloroquine resistant malaria in African children.⁹

Most of the above studies express effectiveness in terms of a single dimension and thereby permit direct comparison between alternative procedures in terms of their marginal cost per unit of outcome. Sometimes, however, the alternatives under examination have multiple outcomes. None the less, many of these choices can be dealt with within the cost-effectiveness analysis framework. Thus if one procedure emerges as less costly and of equal or greater effectiveness than all the other options on each dimension of effectiveness, it is clearly the most cost effective option. For example, Percival and Setty, in their comparison of day surgery with overnight inpatient care for cataract surgery, measured outcomes in terms of the number of both operative and postoperative complications, and in terms of visual acuity of patients three to six days and 10 weeks to six months after surgery.¹⁰ Patient satisfaction was also elicited through a questionnaire. As day surgery emerged as the more effective option on

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