

ORIGINAL ARTICLE

Is posthumous semen retrieval ethically permissible?

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It is possible to retrieve viable sperm from a dying man or from a recently dead body. This sperm can be frozen for later use by his wife or partner to produce his genetic offspring. But the technical feasibility alone does not morally justify such an endeavour. Posthumous semen retrieval raises questions about consent, the respectful treatment of the dead body, and the welfare of the child to be.

We present two cases, discuss these three issues, and conclude that such requests should generally not be honoured unless there is convincing evidence that the dead man would want his widow to carry and bear his child. Even with consent, the welfare of the potential child must be considered.

There have been sporadic reports of babies born after posthumous conception since the technology became available 50 years ago. Most commonly, a young man has an illness which threatens his fertility or his life—for example, testicular carcinoma. He has some of his semen frozen in order to impregnate his wife in case he should become sterile or to impregnate his widow if he should not survive. In these relatively uncommon cases of posthumous conception, legal questions have been raised about inheritance and eligibility for survivor benefits.¹ Few questions have been raised, however, about the ethics of the procedure because the semen was donated voluntarily, before death, with the expressed intent of use after death.

Retrieval of viable sperm after death, first described by Rothman in 1980,² raises significantly different issues. It has been reported in the popular press that a baby has been born using posthumous sperm collection³ after a young man died unexpectedly from an allergic reaction. At his wife's request, sperm was collected 30 hours after death. Fifteen months later his sperm were used to impregnate his widow.

Such requests are infrequent; 82 were reported in the US in a 1997 study, of which about one-third were honoured.⁴ Reported successes will likely encourage more requests. In addition, the advent of intracytoplasmic sperm injection (ICSI) now makes it possible to fertilise an egg in the laboratory using a single sperm rather than the several cubic centimetres of semen required for artificial insemination. After describing the technical feasibility of sperm retrieval after death, however, a standard textbook of urology concludes: "[t]he ethical appropriateness of such retrieval is the most important issue surrounding its use".⁵

An identical endpoint—the dramatic birth of a dead man's baby—makes voluntary sperm donation before death and involuntary sperm retrieval after death seem only a small step apart. The difference between these two procedures is not, however, a small step.

In Western society, there is no universal prohibition of posthumous gamete retrieval or posthumous *in vitro* fertilisation. However, recently reported successes have prompted discussion in the popular press.⁶ These practices raise at least three significant ethical questions. First, the method of sperm collection raises issues about respectful treatment of a dead

body. Second, there is the issue of consent, important in all invasive procedures. Third is the issue of the welfare of the child to be. We will present two cases which highlight these issues.

CASE 1

A 28 year old man had been married for six years and he and his wife were childless. He became depressed after a marital separation three months ago. Two weeks ago he started antidepressant medication, but today he was brought to the hospital by paramedics with a self inflicted gunshot wound to his head. Six hours later he was pronounced dead in the intensive care unit. He is the only child of his parents. Just before he died, they asked the intensive care physician to arrange for sperm retrieval after his death so that they might have a grandchild. They said they are certain he would want his biological line continued, and they thought his estranged wife, who had been contemplating reconciliation, would be willing to have his child.

A clinical ethics consultant was asked to review the situation and make recommendations. After talking with the parents and widow, he was unable to elicit any substantiating evidence that the man would want his widow to bear his child. He recommended against the requested sperm retrieval.

CASE 2

A 36 year old previously healthy man was admitted with pneumonia. He developed adult respiratory distress syndrome requiring assisted ventilation. After 14 days of aggressive treatment, he became obtunded and developed multiorgan system failure, and his wife was informed that he would not survive. She asked if semen could be collected so that she might yet have his child. An ethics consultation was requested.

They had been trying unsuccessfully to have a child for over 10 years. Two months before this illness they saw an infertility specialist and were to begin *in vitro* fertilisation with her next menstrual cycle. Although this history indicated his desire to become a father, this alone could not be construed as consent for either sperm collection in this circumstance of impending death or for posthumous collection. The uncertainty of

whether he would want his wife to be a single mother after his death was troublesome, and his views on the wellbeing of a child raised by a single parent were likewise unknown. The wife believed that he would want this, but they had never discussed the possibility. This presumption was supported by his sister who had talked with him about his intense desire to have children in order to continue his family name. But is a wife's intense desire for her husband's offspring morally relevant, and if it is, is it sufficient to justify the removal of semen without his explicit consent? His physicians, nurses and ethics consultant believed the available information adequately supported his wife's expression of his presumed wishes. Within one hour of his death, his epididymides were removed and frozen.

RESPECT FOR THE DECEASED PERSON

Metaphysically, the person disappears from his or her body at death, but the dead body continues to command respect.⁷ This nearly universal respect for the dead body can be observed as the evening news brings images of grieving survivors searching for the bodies of their loved ones who have been lost at the scene of natural disasters around the world. In most cultures, there seems to be an innate drive to recover bodies so they may be given proper burial. Though individuals in some cultures may believe that organs and physical structures of the once living are no longer important, this is distinctly uncommon in Western society. At the same time, this almost sacred respect for the dead body is not held to be absolute. Most people in Western society accept that there are some exceptions when the body may be disturbed before being buried—for example, for postmortem examinations, and for organ or tissue retrieval for transplantation. Other uses of the dead body have led to considerable controversy—for example, the practising of medical procedures by medical trainees.

Postmortem examination has been practised at least since the time of Julius Caesar⁸ in order to learn the cause of death, to further understand the pathology or pathophysiology of disease, or for medicolegal reasons. While many individuals still have a natural revulsion to the idea of cutting, opening, and inspecting the dead body, the potential benefits to the medical profession, the family, or to society as a whole have generally overcome this resistance as long as the autopsy procedure is carried out with the maximum possible respect for the departed person.

For over 30 years, after informed consent by all parties, organs and tissue have been retrieved from recently dead bodies and have been used to save thousands of lives. The concept of death using neurologic criteria, developed primarily to allow the timely retrieval of usable organs, has not, however, been universally accepted,⁹ and continues to be the subject of controversy.¹⁰ The drive to overcome the current shortage of organs for transplant has led to the development of new techniques for retrieval of organs from "non-heart-beating cadaver donors",^{11,12} with not-unexpected criticism.¹³ But overall, a majority of individuals in Western society believe the good achieved by the donation of organs and tissues outweighs initial concerns about the desecration of the dead body.¹⁴ In spite of this consensus, there has been some aesthetic, cultural, and religious resistance to the practice of organ retrieval and transplantation as an enterprise. In addition, some who accept organ transplantation have specific reservations about the disrespectful treatment of dead bodies in some circumstances. For example, Frader has criticised the practice of providing artificial support for a pregnant corpse in order to bring the gestating fetus to viability, maintaining that this represents a profound disrespect for the dead body.¹⁵

The responsibility for disposition of the dead body has traditionally been given to the family, or when no family is available, to the church or the state. Consent is almost always sought from the family or the state before doing procedures

which would otherwise be deemed disrespectful. While occasionally a medicolegal postmortem examination is authorised by the state over the objection of family, most autopsies are preceded by the consent of the family. Likewise, organs are not removed for transplantation without the consent of the family. It is an interesting commentary on contemporary society that even when a person has specifically documented in writing that he or she wants to be an organ donor, transplant teams are unwilling to retrieve organs without explicit agreement from the family. At least in this situation, the wishes of the family are honoured over the explicit wishes of the deceased, perhaps out of concern for liability. But the reverse is not true. If a patient had specifically declined to be an organ donor, transplant teams are unwilling to retrieve organs after his death even with an impassioned plea from his family.

The issues of utility and consent have also dominated discussion of practising medical techniques on newly dead bodies. While a strong case has been made for the utility of such an approach,¹⁶ it has been called "unlawful and unethical" if it is done without family consent.¹⁷ This example of treating dead bodies in less than a respectful way has often been carried out in secret and has clearly not achieved societal acceptance as have autopsy and organ retrieval.¹⁸

The majority acceptance of some instances of trespassing the integrity of a dead body in order to benefit others indicates that the strong societal mandate to show respect for a dead body is not inviolable. The practice of retrieving sperm from men in coma or recently dead has not, however, been similarly accepted. This practice has been criticised as "perilously close to rape" by law professor Andrews.¹⁹

CONSENT

The ethical concept of valid consent and the legal doctrine of informed consent have become firmly established as foundational in the practice of modern medicine.²⁰ Ethically valid consent has three components: (1) the patient must have decision making capacity; (2) he must be given adequate information, and (3) then he must give voluntary consent without coercion.

When a patient does not have decisional capacity, consent may be obtained from a proxy. The proxy's "substituted judgment" ought to reflect the decision that the patient would make if able, based on a written advance directive, the patient's previously expressed wishes, or an understanding of his or her values.

In some situations "implied consent" may substitute for a formal consent discussion. Implied consent may sometimes be inferred from the patient's actions.²¹ For example, when a man comes to the emergency room (ER) complaining of chest pain and collapses, it can be assumed he wanted treatment. Different still is "presumed consent" which does not depend on a patient's words or actions, but is based on a theory of human goods.²² It may be presumed that a person unconscious from injuries sustained in a motor vehicle accident would want to be treated. Thus, when substituted judgment is not possible—for example, in a child who has not developed decision making capacity or in an adult who has not made his wishes known, the proxy is allowed to use the lower and more ill defined standard of "best interests".

When an emotionally involved third party requests sperm retrieval after death, it might seem desirable to seek the same level of certainty we attempt when making other medical decisions, such as limitation of treatment for patients near the end of life. We could use the same hierarchy of (a) patient's current statement; (b) written advance directive; (c) report of previously stated wishes; (d) recognised values, and (e) presumed best interests. When making limitation of treatment decisions, professionals often experience greater discomfort as we move down this scale of increasing uncertainty, but we cannot avoid making the decisions. We must make the

best decision possible in the face of limited information and a particular set of clinical circumstances.

This hierarchy, complex as it is to apply in limitation of treatment decisions, may be even less useful in decisions about sperm collection after death. It is rare for a healthy young man to anticipate life-threatening illness, and even more rare for him to contemplate or discuss whether he would want his sperm to be collected after death so that his widow could bear his child. In addition, such a decision, like many end-of-life decisions, is not just about his life. It has major implications for his wife's future and for the future of his potential progeny.

The legal doctrine of informed consent is based on the ethical principle of autonomy. But this right to self determination should not be misinterpreted to mean that whatever the patient wants should be done. Autonomy is a bounded liberty. Though the patient's negative right to be left alone is nearly absolute, the positive right to have what one wants is clearly not absolute. While a patient may request any treatment desired or imagined, the physician, also an autonomous moral agent, is free to decline a treatment he or she believes is not medically indicated, or is felt to be not in the patient's best interests. A patient's request to forgo or stop dialysis when he finds it disproportionately burdensome should almost always be honoured. On the other hand, a request for narcotics to treat chronic tension headaches should not be honoured if the physician believes an alternative treatment is more appropriate.

WELFARE OF THE CHILD-TO-BE

This recognition that the physician has an obligation to do only beneficial procedures and to decline those which are potentially harmful raises the question "who is the patient in posthumous sperm collection"? Does the physician also have a responsibility to decline procedures which may be harmful to a future individual or future generation?

The Human Embryology and Fertilisation Authority of Great Britain requires physicians who provide assisted reproductive technology services to consider the welfare of the potential child before making a decision to proceed.²³ Most physicians would decline to do artificial insemination for a woman who carries a dominant gene for a lethal condition. Some decline to provide services to single women based on studies showing children of single parents do not do as well as children with both parents.²⁴

A decision to participate (or not) in helping a woman achieve a pregnancy using the semen of her deceased partner, whether voluntarily frozen for that purpose before death or retrieved posthumously, should consider the welfare of the future child. This calculation is exceedingly difficult, and the conclusion may vary depending on the social circumstances and on personal values. But the issue of the child's welfare cannot be overlooked.

LEGAL ISSUES

The development of new technology often raises ethical questions about its use. Sometimes these "should we...?" questions seem to be settled by statutory or case law, but usually only after an extended time of legal uncertainty. For example, death defined by neurologic criteria was first proposed in 1968, but settlement of the legal uncertainties did not begin in the US until the proposal for a *Uniform Determination of Death Act* in 1981. While legislative or judicial determinations often give an imprimatur to a particular action, this does not always fully answer the ethical questions.

There has been some legislative and judicial activity on issues of the status of frozen embryos, parentage after the use of anonymous or designated donated sperm, inheritance after posthumous conception, and other related issues. According to a recent review, however, there have been no laws or cases

which give clear guidance about posthumous sperm collection.²⁵ Based on existing standards of consent, the authors conclude that spousal requests for sperm collection after death should be declined unless there is prior consent or known wishes of the decedent. Their interpretation of the legal climate focuses on the intent of the man, but does not address the issues of treatment of the dead body or the well-being of the potential child.

DISCUSSION

How should we view a request for sperm collection after death? Does it resemble the family's right to give permission for procedures after death such as autopsy, organ donation, and practising medical technology? If so, can we honour family requests for this procedure? Or might the welfare of the potential child be an overriding consideration?

Although the sperm retrieval procedure itself is far less invasive, destructive, or disfiguring than is an autopsy, the invasiveness seems less important than the man's preferences and the long term consequences for the woman and the child. Autopsy and organ retrieval have more immediate consequence to the dead body, but very little ongoing consequence to the deceased or his family. But sperm retrieval has major consequences for his family and also for his own legacy. In our view, there is a difference in kind between autopsy and organ retrieval on the one hand, and sperm retrieval. Giving consent for autopsy or for organ retrieval for transplantation is giving to benefit others. But requesting sperm retrieval after death without the consent of the dead man is not the same; in fact it is not giving at all—it is instead taking, because its aim is to benefit the person making the request. While retrieval of organs after death without the explicit consent of the decedent is likewise taking, it is different in that the family who is giving consent is altruistically giving the organs for someone else's benefit. The parents or woman who request sperm retrieval after death without the explicit consent of the dead man are making a request for their own benefit. Thus, proxy "consent" in this situation is not consent at all.

In our view, if a man had steadfastly refused to have a child while alive, it would be ethically wrong to honour a request to retrieve his sperm for use after his death. At the other extreme, if we had a clear written or verbal statement from him that he would want to father a child after his death, it might be justifiable to assist this endeavour. If, however, as will likely be the situation in most cases, we do not know his wishes, we must rely on the best available information. In our view, it would usually be appropriate to decline such requests. This stance of non-retrieval without the patient's prior consent or known wishes is supported by the American Society of Reproductive Medicine.²⁶ They go on to say that "such requests pose judgmental questions that should be answered within the context of the individual circumstances and applicable state laws". While this decision might intensify the grief of the widow, and the poignancy of this refusal would seem to heighten the tragedy of his death, it is the ethically most defensible position based on the presumed rights of the dead or dying patient.

Even with consent, how strongly should we consider a man's stated desire to produce offspring or preserve his family name? While the strength of this desire is clearly evident in many discussions of infertility, it is also true that the desires of many infertile couples can be met through adoption. Thus, the use of requested technology is not always needed to satisfy such desires, and some would say the availability of such alternatives make the use of technology unjustified.

In case 1 above, the lack of consent and lack of knowledge of the man's wishes led appropriately to a refusal to comply with the request. In case 2, there was likewise no consent. His willingness to undergo infertility testing and their plan to pursue in vitro fertilisation suggests that this man had a

strong desire to have a child. While this evidence gave some guidance to his medical professionals, it provided no indication of his wishes about his wife having his child after his death. Although she was probably in a position to know his wishes better than anyone else, her own self interest could have clouded her understanding of what his wishes would have been in circumstances that he never discussed and probably never contemplated. His sister's statement lent some support to his wife's contention, but this is still not as definitive as if he had made an explicit statement. The decision to honour her request was thus not clear cut, but was a marginal judgment call.

CONCLUSION

A request for sperm retrieval after death should not be honoured unless there is convincing evidence that the dead man would want his widow to carry and bear his posthumously conceived offspring. Even when consent is available, professionals should also consider the welfare of the potential child. The evidentiary standards for such a decision are difficult to define and far from clear.

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