

## PAPER

## Perimortem gamete retrieval: should we worry about consent?

Anna Smajdor

## Correspondence to

Dr Anna Smajdor, Norwich Medical School, University of East Anglia, Norwich NR4 7TJ, UK; [a.smajdor@uea.ac.uk](mailto:a.smajdor@uea.ac.uk)Received 16 July 2013  
Revised 15 April 2014  
Accepted 10 June 2014

## ABSTRACT

Perimortem gamete retrieval has been a possibility for several decades. It involves the surgical extraction of gametes which can then be cryo-preserved and stored for future use. Usually, the request for perimortem gamete retrieval is made by the patient's partner after the patient himself, or herself, has lost the capacity to consent for the procedure. Perimortem gamete retrieval allows for the partner of a dead patient to pursue jointly held reproductive aspiration long after their loved one's death. But how can we know if the dying patient would have consented to gamete retrieval? In the UK, consent is a legal necessity for storing or using gametes—but this is not always enforced. Moreover, although the issues related to posthumous reproduction have been discussed at length in the literature, few commentators have addressed the specific question of retrieval. Gamete retrieval is an invasive and sensitive operation; as with any other intervention performed on the bodies of dead or dying patients, the nature and justification for this procedure needs to be carefully considered. In particular, it is important to question the idea that consent for such an intervention can be inferred solely from a person's known wishes or plans concerning reproduction.

## PERIMORTEM GAMETE RETRIEVAL: SHOULD WE WORRY ABOUT CONSENT?

Perimortem gamete retrieval is increasingly recognised as a feasible means of preserving the reproductive potential of dying patients.<sup>1 2</sup> To date, most requests have come from wives requesting their husbands' sperm, but perimortem egg harvesting is also feasible.<sup>3</sup> Many countries around the world are grappling with the ethical and legal implications of these possibilities. The consent of the dead or dying patient is widely viewed as being ethically and legally important. Yet, in many jurisdictions, the agreed importance of consent has not been legally enforced, leading in some cases to inconsistencies and uncertainties as to how to deal with perimortem gamete retrieval requests.<sup>4 5</sup> Moreover, few commentators have addressed the specific question of *retrieval* as a procedure. Gamete retrieval is an invasive and sensitive operation; as with any other intervention performed on the bodies of dead or dying patients, the nature and justification for this procedure needs to be carefully considered. In particular, it is important to question the idea that consent for such an intervention can be inferred solely from a person's known wishes or plans concerning reproduction.

In the UK, it is illegal to store or use gametes without the consent of the person from whom they

were obtained. Nevertheless, it appears that retrieval itself sometimes takes place without such consent.

There are important legal considerations here, and these also call into question the ethical concerns that are at stake. We can think about what the law IS, and also about what the law SHOULD be. In this context, ethics and law are intricately intertwined, and cannot be entirely separated. Therefore, while this paper is an ethical analysis, it is an ethical analysis of *the legal situation* and the way that the law functions.

One of the earliest documented cases of perimortem sperm extraction occurred in the UK in 1995. The man in question—Stephen Blood—had contracted meningitis and fell into a coma. His wife, Diane, asked doctors to retrieve some of his sperm. Two samples of semen were obtained by electroejaculation while Mr Blood was being maintained on a ventilator.<sup>6</sup> Stephen Blood never regained consciousness, so he was unable to consent either to the retrieval, storage or use of his sperm. UK law stated that gametes cannot be stored without the written consent of the person from whom they were obtained<sup>7</sup> and accordingly, Mrs Blood was informed that she could not use the sperm in the UK, though storage was permitted, while Mrs Blood challenged this decision in court.

Mrs Blood eventually won the right to take her husband's sperm abroad and had two children. In 2002, Orr and Siegler published an analysis of the ethical issues involved in perimortem gamete harvesting, prompted largely by the events surrounding Mrs Blood's case. They identify three primary ethical concerns: the need for consent; the question of respect for the dead person's body, and the welfare of the child who may be conceived. They conclude that in most cases it is not acceptable to obtain sperm without consent. For the purposes of this paper, I will not attempt to answer the question of what role the welfare of the child should play, but will focus on the first two questions, concluding that it is anomalous legally and ethically to harvest gametes without consent. To this extent, I concur with Orr and Siegler. However, I raise an additional problem that they do not address. That is, that if sperm is permitted to be stored and used despite having been obtained without consent, the power of the law to protect the dead or dying person's body is undermined.

Diane Blood's case demonstrated the following:

- A. if someone retrieves or stores gametes without consent, s/he will not necessarily be prosecuted;
- B. if someone does retrieve or store gametes without consent, s/he may be permitted to export it in order to use it abroad.

To cite: Smajdor A. *J Med Ethics* Published Online First: [please include Day Month Year] doi:10.1136/medethics-2013-101727

It was argued by many commentators, including the judges concerned, that Mrs Blood's situation was utterly unique.<sup>8 9</sup> Mrs Blood's case came about almost by accident, as it were, since perimortem gamete harvesting was a novel possibility, and those who carried out the intervention might have been unaware of the legal implications. For this reason, it was argued, allowing Mrs Blood to use the sperm would not set a precedent. Such a case would never arise again.

However, in 2008, a very similar set of circumstances arose. A man referred to as 'H' died unexpectedly during a routine operation. His partner, 'L', asked for sperm to be extracted from H, and this was carried out.<sup>10</sup> H had not given prior consent for the retrieval, storage or use of his sperm. The Human Fertilisation and Embryology Authority (HFEA) therefore informed L that she could not use the sperm in fertility treatment in the UK—just as they had done with Mrs Blood. However, also as happened in Mrs Blood's case, L was told that she could still seek to export the sperm for treatment abroad. Pending the decision, the sperm would be kept—now with the HFEA's permission—pending L's decision on what to do next.

Just as Mrs Blood's lawyers had argued, L's lawyers insisted that her position was unique.<sup>11 12</sup> Can it really be true that *both* these cases were unique? The answer to this question is of importance from a legal and an ethical perspective. In both cases, interventions were performed on the bodies of dead or dying patients without their consent. If the result of Diane Blood's case did not serve to prevent repetitions of this kind of intervention, L's outcome might likewise demonstrate that other people in similar situations could benefit from taking and storing their partners' gametes without having obtained consent.<sup>13</sup>

Following Mrs Blood's highly publicised case, the HFEA received many requests from partners and relatives of dying patients, requesting extraction of sperm and eggs.<sup>14</sup> These requests were refused. But anybody who had really taken note of the implications of Diane Blood's case might have seen that taking gametes pre-emptively and dealing with the legal repercussions later—as in L's case—would be the better option. This raises the question of whether it is illegal to *retrieve* sperm without consent. It seems that there is dispute over this issue. Some commentators hold that the retrieval of gametes is clearly unlawful if undertaken without consent.<sup>14</sup> Others, including L's solicitors, find that the legality of sperm retrieval remains uncertain.<sup>8</sup> Perhaps the best that we can do legally is to acknowledge that there is no *certainty* that gamete retrieval itself is legal without consent.

Doubts over the legality of gamete retrieval without consent might be thought to encourage a precautionary approach, which would deter people from undertaking the operation. However, when the law relating to *storage* and *use* of gametes is not enforced, as in the cases of L and Mrs Blood, and given that there have been no prosecutions arising from gamete retrieval, any precautionary instinct might seem unnecessary. To summarise, patients' gametes have been taken and stored without their consent on more than one occasion in the UK. We need, therefore, to consider whether it is acceptable that this should continue to happen, or whether the law needs to be changed or tightened. Alternatively, it might be argued that the reason for the failures to prevent or prosecute gamete retrieval and use without consent is that the law is excessively restrictive in this context. It may be that rather than tightening the legal framework, we should loosen it to allow for the perimortem retrieval of gametes from patients who have not consented.

## DO THE DEAD HAVE INTERESTS?

Some would argue that what happens to a person after his death is no longer of concern. One's own interests evaporate with the loss of the power to experience what is happening. If one holds this view, it is implausible to suppose that the dead can be harmed.<sup>15</sup> Those who hold this view might suggest that the interests of the living supercede any moral concerns we might have for the dead.<sup>16</sup> Mrs Blood and L had a powerful interest in what their partners' bodies could yield, and if we accept that the partners themselves were no longer in a position to have interests, why quibble about fulfilling those of the spouses?

The first point to make here is that Mr Blood's sperm was extracted *while* he was dying. The phrase 'perimortem' refers to the period before, during and after a death. Therefore, even if we take the strong position that the dead have no interests, it does not follow that perimortem gamete extraction is permissible—even if postmortem extraction *is*. Clearly, if one takes the view that there is a sharp dividing line between the living who have interests, and the dead who have not, identifying the exact moment of death will be crucial. The harvesting of organs and tissues is time-sensitive, and the quality of the material obtained deteriorates rapidly after death. Because of this, where there are plans to harvest tissues, it is usually done either while the patient is being sustained on life-support, or as close to the moment of death as possible, that is, during the 'perimortem' period, during which the patient is in the process of dying, but may not actually be dead. Thus, even if we accept the view that the dead have no interests, this would only justify gamete retrieval where death has been definitely established.

In the case of patients who *are* straightforwardly dead, it is true that many would argue that they have no interests, or that such interests as they do have are clearly outweighed by those of the living. I will not attempt to disprove this here. However, there are a number of important considerations here. First, as Orr and Siegler observe, there is a near-universal tradition of respect for the dead.<sup>17</sup> Moreover, the law enforces strict control over the ways in which dead people's bodies can be treated. While law and ethics are not to be conflated, it is undeniable that ethical reasons and values contribute to this legal standpoint.

Therefore, if we believe that a dead person's wishes have no ethical validity, and should have no legal weight—and that this justifies postmortem gamete extraction without consent—we would be committed to many other legal changes for the sake of consistency. These might include the following activities: exhibition of the body, or body parts; research undertaken on the body, body parts, or tissues; harvesting of the organs. It would also imply the need for a rethink of the respect we give to people's wills. If the wishes of the deceased are of negligible relevance, and hence should not be supported in law, the dead person's assets (corporeal and monetary) might be reallocated according to a number of different principles, unconnected with what the person might have wanted.

For now, I will assume that the ethical importance of respecting the wishes of the dead is at least worthy of consideration in law. Nevertheless, there are some situations in which it is commonly deemed acceptable to perform interventions without a person's consent. I will therefore go on to consider whether the perimortem retrieval of gametes fits into any of these categories.

## PROCEDURES CARRIED OUT WITHOUT CONSENT

Usually what happens to people's bodies—when living, dying or dead—is a matter of significant ethical and legal interest.<sup>5 18</sup>

The primary justification for performing an intervention on a patient's body for collecting or using their tissue, is that one has obtained the person's consent. However, there are some circumstances in which procedures are carried out without the patient's consent. Diane Blood observed that the attempts of medical staff to save her husband's life were intrusive, invasive, undignified—and they were carried out without his consent. For her, it was illogical to quibble at the additional procedure of gamete retrieval given that it was merely one among many procedures to which he had not consented. However, it could be argued that there is a logical distinction between gamete extraction and other procedures.

When a person is unconscious and suffering from life-threatening injuries, the law allows for treatment to proceed without the patient's consent, but there are limits to the extent of what can be done: the procedures must be very clearly required to preserve the patient's life or health. Other interventions, even if beneficial, are not justified if they are not urgently required. Clearly, gamete retrieval does not fit easily into this framework. Undertaking an additional surgical intervention is, in fact, placing the patient's life at additional risk.

Some might argue that gamete retrieval could be construed as being in someone's best interests, if these interests are understood more broadly than simply medical interests. Similar arguments have been made with respect to organ donation. Perimortem interventions can be undertaken to preserve organs in optimal condition for donation. However, the fact that such interventions are not straightforwardly in the patient's immediate medical best interests is taken by some to indicate that they should not be undertaken.<sup>19</sup> Others suggest that we should expand our concept of best interests. If a patient wishes to donate his organs, perhaps we can regard it as being in his best interests to facilitate this. If this argument is valid, it could also be applied to other perimortem possibilities, including gamete retrieval.

However, if we do attempt to accommodate such interests, we would have to acknowledge that while *some* patients' interests could be furthered by taking steps towards posthumous reproduction, others would *not*. Non-medical interests are variable and subjective. The only way we can know if a procedure *would* be regarded by the patient as being in his best interests is if we already have grounds to believe that this is the case. Once again, therefore, we seem to come back to the necessity of consent in order to determine whether in *this* particular case, it is in the patient's broader interests to undergo gamete retrieval.

## POSTMORTEM EXAMINATION

There is another category of intervention that may be undertaken without the patient's consent—and without regard to whether it is in their best interests: postmortem examination. L's lawyers argued that this gives the lie to the idea that all perimortem or postmortem interventions should require the patient's consent. This analogy is significant—it raises the question of whether the consent requirement is inconsistently applied. If so, this might add weight to the argument that perimortem or postmortem gamete retrieval without consent should be legally acceptable.

However, there is an important moral and legal difference between gamete retrieval and postmortem examination. Medical interventions are usually carried out for the benefit of the patient. This is why consent is important—the question of what is beneficial will depend in part on the patient's wishes and values. Postmortem examination, on the other hand, is *not* designed to benefit the patient. A person cannot draft an

advance directive to veto postmortem examination—because consent plays no part in the postmortem legal framework. Postmortems are carried out for the broader social good: to establish the cause of death, and to identify whether a crime has been committed. Because of this, the question of the patient's wishes, or the family's preferences, are simply not relevant.

The parallel between perimortem gamete retrieval and postmortem examination, therefore, founders. It is worth noting, however, that if we construe the dead person's tissues and organs, as being themselves capable of yielding significant public goods, we might want to recategorise tissue harvesting, to remove it from the consent framework. However, again, if we were to be consistent about this, we would need to think about its broader ramifications. It is undoubtedly true that the bodies of dead—and living—patients are capable of yielding benefits to a wider public. Organs may be retrieved and transplanted, benefiting the recipient and the public more generally, as money is saved, and pressure on the health service reduced. The use of bodies, tissues or organs for research purposes may likewise yield significant public benefit. Medical students may derive benefit from dissecting bodies, or practising procedures on perimortem patients.<sup>20</sup>

Given these benefits, why is it that we do not routinely use or harvest the bodies of dead and dying patients in order to secure the maximum public good? The answer seems to be that the law is not based on purely utilitarian principles, but places a higher value on the importance of respecting an individual's wishes. One might argue that these priorities are mistaken, and clearly those who wish to obtain tissues from dead or dying patients would do so. But unless those who make these claims are prepared to defend their broader implications, as outlined above, the arguments are not compelling.

## INFERRED CONSENT

I have argued that retrieval of gametes does not fit in the same framework as emergency life-preserving treatment, nor in the same category as postmortem examination. Therefore, unless otherwise indicated, it would appear that the ethical and legal requirement for consent remains imperative. Orr and Siegler suggest that ethically valid consent is based on three requirements: (1) the patient must have decision-making capacity; (2) he must be given adequate information and (3) he must give voluntary consent without coercion.<sup>17</sup> In the cases we are discussing, no such consent had been given.

However, it may be that even if consent cannot formally be obtained directly from the patient, it can be inferred from what has previously been known about the patient. Mrs Blood and L believed that their husbands would have wished them to have their children after their death, and that their husbands' consent to perimortem gamete retrieval could be inferred from things they had done or said prior to becoming ill. Mrs Blood argued that her husband's comments concerning a news report on posthumous insemination could be taken as the basis for his inferred consent to perimortem gamete retrieval. L argued that H's consent could be inferred from the fact that they had been planning to have IVF. On the face of it, both seem strong arguments to support the idea that these men *would* have consented if they had been given the opportunity. But on closer analysis, we encounter problems. In both cases, the leap from what has been discussed, or undertaken, to the process of gamete retrieval, is significant.

To infer a current willingness to have one's sperm surgically extracted from a prior willingness to undertake IVF is epistemologically dubious. The fact that H had considered IVF tells us

nothing specific about his feelings concerning perimortem gamete retrieval, or posthumous parenthood. H might have had strong feelings either for or against these things, but we cannot infer these solely from his intention to participate in IVF. And indeed, we cannot even infer an intention to undertake IVF from the fact that someone has considered it. This is precisely why consent to undergo IVF or any other medical procedure is not simply assumed on the basis that the patient has walked into the clinic or hospital.

Inferring consent for Mr Blood might seem more plausible, since he had explicitly discussed posthumous parenthood. However, even here there are difficulties in knowing how much we can extrapolate from what is known. Mr Blood expressed no views on perimortem *sperm retrieval*. His discussion with his wife referred to a situation in which a man had banked sperm while living, which was in storage when he died. The possibility of using the sperm to conceive a child in this case required no intervention on the dying man. By contrast, posthumous fatherhood in Mr Blood's case was not simply a question of allowing his wife to access sperm already produced and stored with his knowledge and consent. Rather, it entailed an invasive surgical procedure of which Mr Blood had had no prior knowledge.

The physical intervention which would be required for H and Mr Blood to become fathers was thus very different from anything that we are entitled to believe that they had considered or intended. The implications of the arguments in favour of inferred consent for perimortem sperm extraction seem to be that if someone has decided to become a parent, the means by which this is achieved is of little relevance. In order to address this question, it is important to be clear about the processes that are involved. Electro-ejaculation, the method used to retrieve sperm from comatose men, requires the insertion of a catheter through the urethra and into the bladder, from where the sperm will be collected. Once the catheter is in place, an electric probe is inserted into the rectum. Electric shocks are administered rhythmically, increasing in strength until ejaculation occurs. Sperm is discharged into the bladder, and collected via the catheter.<sup>21</sup>

The prospect of such a process being carried out during one's dying moments, or even after one's death might be such as to give pause for thought. In medicine generally, consent for procedure X cannot be inferred from someone's previous beliefs about situation Y.<sup>22</sup> It seems plausible that some men who might be willing in theory to become fathers posthumously, would change their minds if fully aware of what the procedure entails. If it is plausible that this could be the case, it is *not* convincing to infer consent to this procedure even if the man in question has previously expressed an intention to become a posthumous father. Understandably, perhaps, Mrs Blood herself did *not* want to know the details of the procedure she had requested for her husband. She believed the details were irrelevant. However, details *are* relevant to questions about consent. We cannot infer a person's consent to an intervention if he has no idea what it involves.

It is deeply implausible to suggest that the wish or intention of having a child could in itself be construed as consent to the procedure of electro-ejaculation or, indeed, of any other procedure required to bring about a pregnancy. We should not forget that up until fairly recently, a woman's consent to sex was inferred from her willingness to get married. In short, a man could not be prosecuted for raping his wife. The law relating to this was changed only in 1991 in the UK. Women fought against this inference, to ensure that willingness to marry is NOT deemed to mean that they have abrogated their interests

in determining what is done to their bodies. Perhaps they should be willing to afford men the same respect.

### PROXY CONSENT

I have argued that inferred consent is epistemologically inadequate, and also dangerous and unjust in this kind of case. However, the possibility of proxy consent might be a better alternative. A spouse is the most likely person to know her husband's wishes. Frequently, in England, spouses are asked whether their partner would have wanted to donate their organs, and their views are usually respected. If this is permissible in the context of organ donation, why not ask spouses' evidence as to patients' wishes regarding *reproductive* tissue as well as organs? Then a husband could sanction the retrieval of his wife's eggs, just as he could advise on whether she would have wanted to donate her kidneys or liver.

Again, however, there are important differences between the two examples. When a husband provides proxy consent to allow his wife's organs to be donated, it is assumed that he has no personal interest in the organs. The decision to donate is construed as an altruistic act. Relatives can agree to donate a loved one's tissue, but *they cannot demand access to that tissue for themselves*. The reasons for this are straightforward. Human tissues and organs are valuable commodities. This means that the bodies of dead and dying patients are vulnerable to exploitation. If the person testifying as to the patient's wishes and providing proxy consent is *also* the one who stands to gain from the tissue that is made available, there is a clear conflict of interest.

This was illustrated in 2008, when a young woman, Laura Ashworth, died unexpectedly. Ms Ashworth was on the organ donor register, and her organs were duly harvested. However, Ashworth's mother, Rachel Leake, believed that *she* should receive one of her daughter's kidneys. Ms Leake claimed that Ms Ashworth had wanted to become a living donor, so it seemed logical that the kidney should go to her mother. But Ms Leake did not receive the kidney.<sup>23</sup> This situation resembles that of Mrs Blood and L. Individually, it seems tragic that people should suffer when such a simple action could fulfil their needs or desires. Yet the point above is crucial. People's bodies are vulnerable to exploitation. The law is designed to prevent such exploitation, and therefore some individuals are denied what they seek. In the case of L and that of Diane Blood, evidence concerning the patient's wishes depended on the testimony of the people who had the most explicit interest in the outcome. It might therefore be said that in such cases the partner's testimony should be given *less* weight, or perhaps not even sought at all.

### GAMETE RETRIEVAL AS A SPECIAL CASE

If we agree that from a legal perspective, perimortem gamete retrieval without consent is problematic, we might still wish to argue that ethically there may be special arguments in its favour. The desire for offspring can be extraordinarily powerful—enough to override many other values.<sup>24</sup> The sheer strength of reproductive longings is exactly what makes us empathise when these wishes are thwarted. But the nature of such desires should make us wary of bending the law to accommodate them in circumstances where an incapacitated person's body becomes the means by which another individual can achieve their desire.

Some would argue against this, however. Mike Parker suggests that the apparent conflict of interest in such cases is misguided. According to Parker, women such as Mrs Blood, have *joint*

interests with their dead or dying partners.<sup>25</sup> Couples' interests are intertwined in such a way that it makes little sense to construe them as being in conflict. (Similar points have been made about the tendency to construe the maternal/foetal relationship as one in which conflicts of interest arise.)<sup>26</sup>

Yet Parker fails to note that the potential for intertwined interests often coexists with the potential for exploitation of vulnerable individuals. In the case of L and Mrs Blood, it is the vulnerable individual whose body is to yield the tissue that secures the supposed mutual benefit. This, if nothing else, gives grounds for caution. Moreover, Parker's assumption about the congruence of partners' reproductive interests is hasty. Couples' reproductive decisions are not necessarily based on symmetrical and equally held desires. Indeed, this may be a rather unusual ideal. Couples' reproductive choices can be problematic precisely because partners' wishes often do conflict. It is risky and unjust to assume that one partner's reproductive desires can be inferred from those of the other.<sup>27</sup> And if this is the case in the living, it is still more so in the case of the dead or dying, who cannot articulate their dissent.

Even a patient who embarks on a course of fertility treatment cannot be understood to have committed himself or herself to a lifelong reproductive undertaking, or indeed to a wish to have children at all.<sup>28</sup> Parker takes the wish to reproduce as being a single, stable state that is necessarily mirrored by the other partner. It is precisely because this is *not* the case that the Human Fertilisation and Embryology Act (HFE) Act insists that partners receiving fertility treatment consent separately at each successive stage of the proceedings. The law recognises that people's reproductive wishes may change independently of their relationship status. The fact that A is B's husband, and that A previously expressed a wish to have children with B is entirely unsatisfactory in the case of living couples. We still require A's consent. And A's changes of mind or heart are upheld by the law despite the most heartrending of ethical counter-arguments.

Parker also argues that if children are not harmed by posthumous conception, there can be no other concerns associated with the posthumous retrieval of gametes.<sup>25</sup> However, I would suggest that posthumous gamete harvesting sets a risky precedent independently of its effects on offspring. Most of our legal and ethical frameworks reflect the profound interest that we have in what can be done to our bodies without our consent. Deflecting or devaluing these interests in the context of gamete retrieval is a highly significant moral step. The consequences of allowing tissues to be harvested at the behest and for the benefit of spouses may also have repercussions which we do not yet perceive. Hence, perhaps, the acknowledgement of Charles J in the ruling on L that the hearing was in public, and this judgment is a public document because the issues raise matters of public interest.<sup>18</sup>

These concerns go beyond what might be suffered by the individuals concerned and, as I have suggested, raise worrying echoes from the not so distant past. So, should something be done to prevent further cases arising? At the time of the Blood case, it was deemed that this was a situation that could not happen again. A report was commissioned to clarify the law. Published in 1998, it emphasised the importance of consent not just for the storage and use of gametes, but crucially also for their retrieval.<sup>29</sup>

Yet although this report was sanctioned by the government, nothing was done to cement its recommendations. Therefore, scope was left for similar cases to arise. As I have argued, that scope still exists, and the outcome of L's case is unlikely to

resolve this. Since the current law cannot effectively prevent the retrieval, storage, or use of sperm without a person's consent, this raises the question of whether we should

- A. tighten legislation requiring consent for gamete retrieval (and prosecute those who retrieve them without consent);
- B. rescind the HFEA's discretionary power to permit export of gametes obtained without consent.

There are no indications of a move to tighten the law, nor has anyone faced prosecution for any of the acts discussed here. The HFEA retains the ability to sanction the export and use of gametes retrieved without consent. This means that harvesting of gametes from comatose patients may still be deemed worthwhile by some women—and perhaps also by men in future cases.<sup>i</sup>

**Acknowledgements** Thank you to two anonymous *Journal of Medical Ethics* reviewers for their helpful and constructive suggestions.

**Competing interests** None.

**Provenance and peer review** Not commissioned; externally peer reviewed.

## REFERENCES

- 1 Kramer AC. Sperm retrieval from terminally ill or recently deceased patients: a review. *Can J Urol* 2009;16(3):462–31.
- 2 Macrae F. The women hoping their dead husbands can still give them a family. *Mail Online*, 2 Jan 2012. <http://www.dailymail.co.uk/health/article-2081151/The-women-hoping-dead-husbands-family.html> (accessed 25 Mar 2014).
- 3 Greer DM, Styer AK, Toth TL, et al. Case 21-2010: a request for retrieval of Oocytes from a 36-year-old woman with Anoxic brain injury. *N Engl J Med* 2010;363(3):276–83.
- 4 Kroon B, Kroon F, Holt S, et al. Post-mortem sperm retrieval in Australasia. *Aust NZ J Obstet Gyn* 2012;52(5):487–90.
- 5 Williams D. Over my dead body: the legal nightmare and medical phenomenon of posthumous conception through postmortem sperm retrieval. *Campbell L Rev* 2011;34:181.
- 6 Blood D. *Flesh and blood: the human story behind the headlines*. Edinburgh: Mainstream Publishing, 2004.
- 7 Consents to use of gametes or embryos. *Human Fertilisation and Embryology Act 1990*. 1990 c. 37. [http://www.opsi.gov.uk/Acts/acts1990/ukpga\\_19900037\\_en\\_6#sch3](http://www.opsi.gov.uk/Acts/acts1990/ukpga_19900037_en_6#sch3) (accessed 25 Mar 2014).
- 8 Brazier M. Regulating The Reproduction Business? *Med Law Rev* 1999;7:166–93.
- 9 [1997] EWCA Civ 4003.
- 10 Fight to use dead husband's sperm. *BBC News*, 8 Oct 2008. <http://news.bbc.co.uk/1/hi/england/7659430.stm> (accessed 25 Mar 2014).
- 11 Josiah-Lake D. Posthumous retrieval of gametes: a response. *BioNews*, 1 Dec 2008. [http://www.bionews.org.uk/page\\_38035.asp](http://www.bionews.org.uk/page_38035.asp) (accessed 25 Mar 2014).
- 12 L v. (1) HFEA and (2) Department of Health.
- 13 Brazier M. Hard cases make bad law? *J Med Ethics* 1997;23:341–3.
- 14 Deech R, Smajdar A. *From IVF to immortality*. Oxford: Oxford University Press, 2007.
- 15 Callahan JC. On harming the dead. *Ethics* 1987;97.2:341–52.
- 16 Harris J. Organ procurement: dead interests, living needs. *J Med Ethics* 2003;29:130–4.
- 17 Orr RD, Siegler M. Is posthumous semen retrieval ethically permissible? *J Med Ethics* 2002;28.5:299–302.
- 18 [2008] EWHC 2149 (Fam).
- 19 Watkinson P, McKechnie S, Wilkinson D, et al. Actively delaying death to increase organ donation. *BMJ* 2012;344:e1179.
- 20 Council on Ethical and Judicial Affairs of the American Medical Association. Performing procedures on the newly dead. *Acad Med* 2002;77:1212–16.
- 21 Patel ZP, Ross HE, Ross LS. Request for posthumous fatherhood with perimortem surgical sperm retrieval. In: Sharif K, Coomarasamy A, eds. *Assisted reproduction techniques: challenges and management options*. Chichester: Wiley-Blackwell, 2007:353–60.

<sup>i</sup>A case recently emerged in the US, where a husband requested that eggs be removed from his wife before life support was switched off. I am not aware of any egg retrieval requests in the UK, but it seems plausible that it may arise, especially if the possibility becomes generally known. Again, the precedent set in the Blood case is likely to mean that the eggs could be exported for treatment abroad.

- 22 O'Neill O. Informed consent and public health. *Philos Trans R Soc B Biol Sci* 2004;359:1133–6.
- 23 Mother denied daughter's organs. *BBC News*, 12 Apr 2008 <http://news.bbc.co.uk/1/hi/england/bradford/7344205.stm> (accessed 25 Mar 2014).
- 24 Chadwick R. *Ethics, reproduction and genetic control*. London: Routledge, 1994. p.xvi.
- 25 Parker M. Response to Orr and Siegler—collective intentionality and procreative desires: the permissible view on consent to posthumous conception. *J Med Ethics* 2004;30:389–92.
- 26 Oakley A. *Essays on women, medicine and health*. Edinburgh: Edinburgh University Press, 1993:84.
- 27 Thomson E, McDonald E, Bumpass L. Fertility desires and fertility: hers, his, and theirs. *Demography* 1990;27(4):579–88.
- 28 [2003] EWHC 2161 (Fam).
- 29 Review of the Common Law Provisions Relating to the Removal of Gametes and of the Consent Provisions in the Human Fertilisation and Embryology Act 1990. London: HMSO, 1997.



## Perimortem gamete retrieval: should we worry about consent?

Anna Smajdor

*J Med Ethics* published online July 3, 2014  
doi: 10.1136/medethics-2013-101727

---

Updated information and services can be found at:  
<http://jme.bmj.com/content/early/2014/07/03/medethics-2013-101727.full.html>

---

*These include:*

- |                               |                                                                                                                                                                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>References</b>             | This article cites 13 articles, 5 of which can be accessed free at:<br><a href="http://jme.bmj.com/content/early/2014/07/03/medethics-2013-101727.full.html#ref-list-1">http://jme.bmj.com/content/early/2014/07/03/medethics-2013-101727.full.html#ref-list-1</a> |
| <b>P&lt;P</b>                 | Published online July 3, 2014 in advance of the print journal.                                                                                                                                                                                                     |
| <b>Email alerting service</b> | Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.                                                                                                                                   |

- 
- |                          |                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Topic Collections</b> | Articles on similar topics can be found in the following collections<br><a href="#">Ethics of reproduction</a> (271 articles)<br><a href="#">Hospice</a> (105 articles) |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

---

### Notes

---

Advance online articles have been peer reviewed, accepted for publication, edited and typeset, but have not yet appeared in the paper journal. Advance online articles are citable and establish publication priority; they are indexed by PubMed from initial publication. Citations to Advance online articles must include the digital object identifier (DOIs) and date of initial publication.

---

To request permissions go to:  
<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:  
<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:  
<http://group.bmj.com/subscribe/>