Post-mortem sperm retrieval in new European Union countries: Case report

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This paper describes post-mortem sperm retrieval from a man who had given prior written consent to the retrieval and use of his sperm in assisted reproduction before his accidental death. The case illustrates some of the complex ethical and legal issues occurring in a new European Union (EU) country and the need for prior preparation by the medical teams involved. We also discuss a questionnaire sent to Centres of Assisted Reproduction in other new EU countries, which reveals a dearth of both legislation and guidelines for post-mortem sperm retrieval. If this method becomes more requested in these culturally diverse countries in the future, the situation demands public debate first of all at the national level.

Key words: consent/ethics/law/post-mortem/sperm retrieval

Introduction

Developments in the area of assisted reproduction techniques have overcome biological limitations and this situation has created new ethical and legal concerns. Cryopreservation, in particular, has shifted the time frame for birth by enabling long-term storage of sperm, embryos and, more recently oocytes and ovarian tissue. This permits pregnancy as well as childbirth in cases where one biological parent has died. Requests for sperm retrieval and cryopreservation may be encountered in men by request, for personal reasons, in oncological patients prior to gonadotoxic therapy, in patients in a persistent vegetative state and in cases of sudden accidental death.

The first case of a successful post-mortem sperm retrieval was reported in 1980 (Rothman, 1980) and between 1980 and 1995, 40 centres in the USA reported 82 requests for it (Webb, 1996; Kerr *et al.*, 1997). Post-mortem sperm retrieval and its utilization in assisted reproduction techniques is now performed worldwide albeit with differences in national culture, ethical values and legislation creating *de facto* divergences.

The basic prerequisite for gamete retrieval should be the prior written informed consent of the deceased. However, since death often occurs unexpectedly, informed consent may not be available and the retrieval may be requested by a surviving partner, parents of the deceased or another person. Indeed, when there is no such prior written consent, the situation only leads to complex legal arguments (Regina v.

Human Fertilisation and Embryology Authority, 1997). In this type of situation, which demands rapid action, the medical teams involved are confronted with a number of ethical and legal concerns.

The first part of this paper describes a case of post-mortem sperm retrieval in accord with Czech legislation, after accidental death. The second part outlines the situation in other new EU countries, where information is lacking.

Case report

In March 2002, a fatal accident at Prostejov airport in the Czech Republic caused the death of a 29 year old Hungarian parachutist. Three days after his death and on the second day after the autopsy, the parents of the deceased contacted the Institute of Forensic Medicine, through the Hungarian Consulate, and requested sperm retrieval from the deceased. A copy of his informed consent was sent through the Consulate. This contained the request that in the event of his death, his sperm was to be retrieved and used for insemination of his partner.

The sperm retrieval was performed after removal of the testes with epididymis by the forensic pathologist. The laboratory at the Centre of Assisted Reproduction then cut fresh sections from both epididymis and irrigated them using Sperm Preparation Medium (MediCult, Denmark). Four millilitres of the sperm solution in a concentration of $8 \times 10^6/\text{ml}$ was obtained. This showed 5% WHO grade 'c'

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motility, 24% normal morphology and 19% vital sperm (World Health Organisation, 1999). The Sperm Freezing Medium (MediCult) was added dropwise to the semen solution in a ratio of 1:1 and mixed carefully after each addition. The resulting mixture was left to stand at room temperature for 10 min before being distributed into eight cryo-tubes and sealed according to the manufacturer's recommendations. The tubes were then suspended horizontally for 30 min over liquid nitrogen and then submerged into it for final storage at a temperature of -196° C. The whole process was recorded in detail and the report was submitted through the Hungarian Consulate to the deceased's parents.

On discovering that the use of gametes for assisted reproduction techniques post-mortem in Hungary is prohibited (Law No. 154, 1997) we were motivated to investigate the practical and legal situation in the other new EU countries, using a questionnaire. This comprised a set of questions: whether post-mortem sperm retrieval is practised, whether written informed consent is mandatory and whether it is allowed or prohibited by legislation or guidelines. Further comments were invited. The questionnaire was sent to Centres of Assisted Reproduction in Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. All centres in the countries mentioned replied. The results are shown in Table I.

Discussion

Much as the number of post-mortem sperm retrieval requests around the world is increasing, the legislative arrangements relevant to the given problems are minimal. The ethical aspects of gamete retrieval, storage and use for assisted reproduction techniques after their originator's death are extremely complicated and are derived from the interests of all parties involved. These include, in particular, the interests of the deceased person, requesting party, future child, health care facility which is to perform the procurement and the interests of the society (Bahadur, 2002; Batzer *et al.*, 2003), given that the latter forms the basis for the legislative framework.

In the Czech Republic, assisted reproduction treatment regulation by legal standards is non-specific. A recent case in

the Czech Republic involved a woman who requested from a health care facility artificial insemination with the sperm of her deceased husband (Prudil and Pilka, 2002). The husband's sperm had been cryopreserved before the commencement of chemotherapy and he had given his consent to the use of his sperm for assisted reproduction treatment if he died. He died and the surviving wife subsequently demanded artificial insemination with her husband's sperm, claiming that he had given his consent. The health care facility refused and a lawsuit ensued. This resulted in a settlement, according to which the defendant (the health care facility) committed itself to performing the artificial insemination of the plaintiff with the husband's sperm which was stored with the defendant. The court based its decision on the Czech Constitution as a whole, specifically article No. 2, § No. 3 of the Declaration of Human Rights and Liberties that states, that 'every person may do whatever is not prohibited by law and nobody can be forced to do what is not required by law' (Law No. 2.

Hungarian legislation, on the other hand, does not allow the use of gametes from deceased persons for the purpose of assisted reproduction treatment. A Health Care Law (Law No. 154, 1997), § 166, article No. 3 states that 'gametes coming from a dead body—including clinical death—or dead fetus cannot be used for assisted reproduction'.

In this legal situation, the IVF/ICSI of the partner may be, in our case, carried out in the Czech Republic, but it cannot be performed in Hungary. The difference in the legislation then requires travelling to another country for the treatment and is an example of the pragmatic use of patients' reproductive autonomy which in some countries is limited by law.

In contrast to the UK (Human Fertilisation and Embryology (Deceased Fathers) Act, 2003), in the Czech Republic, according to existing law, a man from whom sperm had been retrieved post-mortem cannot be the legal father of the child born (Law No. 91, 1998).

As far as the other new EU countries are concerned (Table I), the first thing to note is that the Czech Republic is the only country where post-mortem sperm retrieval for assisted reproduction treatment is practised. The question whether written consent of the deceased is obligatory was therefore only answered by the Czech Republic.

	Practised	Written consent is obligatory	Allowed by legislation or guidelines	Prohibited by legislation or guidelines	Not mentioned ir legislation or guidelines
Cyprus	_	_	_	_	+
Czech Republic	+	+	_	_	+
Estonia	_	_	+ a	_	_
Hungary	_	_	_	+	_
Latvia	_	_	_	_	+
Lithuania	_	_	_	_	+
Malta	_	_	_	_	+
Poland	_	_	_	_	+
Slovakia	_	_	_	_	+
Slovenia	_	_	_	+	_

^aSperm cells can be used for up to 1 month if assisted reproduction treatment already in progress.

Second, in Estonia it is possible by law to use sperm cells for up to 1 month if assisted reproduction treatment is already in progress. In two countries, Hungary and Slovenia, post-mortem sperm retrieval is prohibited by law. In seven out of 10 countries in question, there is no specific legislation or guidelines for post-mortem sperm retrieval and this situation is not very different from countries worldwide (Jones and Cohen, 2004).

Commenting on the fact that in seven out of 10 new EU countries post-mortem sperm retrieval as part of assisted reproduction treatment possibilities is not mentioned in either legislation or guidelines and from the questionnaire comments or lack thereof, it appears that public debate on this issue has not even begun in these countries. The enlarged EU is now more culturally, religiously and historically diverse. The legal systems are also vastly different in the new EU countries. Comparison of attitudes and ethical values, shared expertise and exchange of ideas in such a rapidly evolving field as assisted reproduction treatment between members of these countries could lead to wider and deeper debate within the EU. However, initiation of debate at the national level of the new EU countries is a prerequisite.

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