

Posthumous Reproduction: Issues and Challenges



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Abstract

Advancement in reproductive technologies provides new and diverse opportunities to create offspring. Legal uncertainties often appear in treatments using new reproductive technology as law could not keep pace with the rapid progress of biomedical technology. Cryopreservation techniques has made possible for freezing of gametes, extraction of gametes from deceased person and use of these later for the purpose of non-coital procreation. All these have made posthumous reproduction a reality and this will continue to develop rapidly. However this also raises new set of ethical and sensitive challenges that are likely to be encountered in the court. Regulatory guidelines on posthumous assisted reproduction vary across the countries. India currently does not have regulation concerning posthumous assisted reproduction. Only document available is ICMR's draft ART guidelines which is inadequately addressing the Posthumous assisted reproduction. Fertility clinics have mushroomed in India, a majority of them not registered with ICMR'S ART registry. The present paper highlights the ethical and legal challenges raised by posthumous reproduction.

Keywords: Assisted Reproduction, Posthumous Reproduction, In Vitro Fertilization, Gametes and Cryopreservation.

Introduction

The earliest mention of posthumous conceptions is perhaps in *Osiris myth* the most ostentatious story from "Egyptian mythology" which is about the murder of the God Osiris, a primeval king of Egypt, by his own brother. His body was disarticulated and limbs were scattered on land. Osiris's wife Isis restores her husband's body, and posthumously conceived their son, Horus¹. Such mythological stories are more becoming a scientific reality with the advent of assisted reproductive technologies. (ART). The U.S. Centers for Disease Control and Prevention (CDC) defines ART to include "all fertility treatments in which both eggs and sperm are handled" to establish a pregnancy without sexual intercourse².

An assisted reproductive technology includes a range of methods used to circumvent human infertility. This includes in vitro fertilization (IVF), embryo transfer (ET), gamete intra-fallopian transfer (GIFT), artificial insemination (AI), all manipulative procedures involving gametes and embryos and treatment to induce ovulation or spermatogenesis when used in conjunction with the above methods³. In addition to these surrogate motherhood is also increasingly been considered as an option for those who could otherwise not naturally conceive due to medical complications like inability to produce eggs or when one is not able to carry child to a term. In vitro fertilization (IVF), involves fertilization of eggs and sperm outside of the body, in a laboratory and transferring the resulting embryo in to womb. IVF is the most effective and the most common form of ART. As medical technology advanced new assisted reproductive techniques have emerged. This has given new ways for procreation. However the ability to cryo-preserve the gametes have given all new mechanism for creating life.

Problem/Objective of the Study

1. To find the legal challenges involved in posthumous assisted reproduction by looking to scenario in US UK and Israel, This is because these are the countries where maximum cases of posthumous conceptions are reported.
2. To analyze the laws of different countries related to assisted reproductive technique through which they regulate and manage the procedure of posthumous assisted reproduction.
3. To find out ethical and social issues arising out of posthumous assisted reproduction

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Research Design/Methodology

Author has adopted primarily doctrinal method. The research involved the study of the existing legislations, judgments of various Courts, articles published in journals in the perspective posthumous reproduction. The countries were selected based on number of cases of posthumous reproduction reported. Using the above philosophy a total of five landmark case on posthumous reproduction were reported. These cases are briefly discussed in the present paper. MEDLINE, Pub Med and Google Scholar were searched for articles from 1990 to 2018 using the search terms "ethics of posthumous reproduction" "legal issues in posthumous reproduction, court cases on posthumous reproduction." Using the above search phrases, a total of 40 articles were retrieved out of which 10 dealt specifically with the subject matter. The other sources for the present work comprises of various books, articles, law and science journals, newspapers reports, and other materials available at websites. Draft assisted reproductive technology bill 2014, 2017 is also referred for understanding how posthumous reproduction is applicable in India.

Review of Literature

Author found several literatures and case laws which raised ethical, legal and social issues on posthumous reproduction using stored gametes and posthumous retrieval of gametes. Issue of parentage, inheritance rights and consent of the deceased were some of the main concerns seen in majority of the literature. Right to know the gamete provider and whether to treat gametes as a property is another concern seen in literature. Fertility preservation for medical purpose has also raised legal and ethical issue in the event of death of the gamete provider particularly when the gamete provider is minor. Most of these issues are reported from US, Israel, UK, Australia and New Zealand. Number of disputes has been reported from around the world over the status of cryopreserved gametes, posthumous sperm retrieval, and posthumous use of gametes / embryos status of embryos after the divorce/ separation. These issues have started emerging in India too. Certain literature showed concern on misuse of ART.

Cryopreservation

Cryopreservation of a cell involves the cooling of a cell and storage at a temperature where all metabolic processes are arrested. It involves the cooling of a cell and storage at a temperature where all metabolic processes are arrested. In practice, frozen cells are stored at the temperature of -196°C in liquid nitrogen. Cryopreservation is a way of preserving germplasm that have applications in agriculture, aquaculture, biotechnology and conservation of threatened species. Cryopreserved cells and tissues can endure storage for centuries with almost no change in functionality or genetic information, making this storage a highly attractive method⁴. Cryopreservation is in fact a medical boon for people suffering from diseases like cancer and many other diseases where treatment at times may interfere with their reproductive ability. For cancer patients, cryopreservation allows them to store their

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gametes before proceeding for chemotherapy for use in later life. A number of British soldiers posted in war-torn Afghanistan are reported to be freezing their sperm in case they are killed or maimed⁵. The Pentagon announced a pilot programme to cover the cost of freezing sperm and eggs of American troops⁶. Oocyte cryopreservation is being introduced into clinical practice and is considered to be more acceptable. Oocyte cryopreservation or freezing of a woman's eggs is stated to be an option to extend fertility and delay motherhood. Silicon Valley technology giants have offered \$20,000 to both full-time and part-time women employees to freeze their eggs and \$480 annually to store them in order to enable these women to focus on their careers and delay child bearing⁷. Embryo freezing is a routine procedure followed in ART.

Posthumous Reproduction/Conception

Cryopreservation has also made possible to extend fertility beyond death, ultimately allowing reproduction to occur even after the death of genetic parents⁸, a technique called as Posthumous assisted reproduction. No other ART technique developed in the past was so controversial, as that of posthumous reproduction or posthumous conception. Not only it raises complex familial relationship but it also raises the legitimacy of child. Throughout the world, children who are conceived during the lives of their parents, even if born after the death of a parent, are protected under the laws of inheritance and are considered as lawful heirs⁹. However not every country is open to posthumous reproduction. Regulatory frame work on posthumous reproduction varies across the country. There are certain countries which completely ban posthumous conception. While, others allows with limited restrictions. Posthumous conception in simple term refers to conception after the death of either of the parent or both the parents. It is different from posthumous child birth where conception occurs before death. Posthumous conception can be achieved by two methods. It can either be accomplished using gametes (a sperm, an egg) or an embryo that was cryopreserved by the individual themselves for future parenthood, or it can be achieved by using the gametes that was retrieved after an individual's death at the request of a surviving partner. Both methods are reported. However the former method is more common¹⁰. Birth of twins from in vitro fertilization using semen stored for approximately 40 years was reported by Szell, Andras Z et al.¹¹

Post mortem retrieval of sperm/eggs

Rothman first reported viable post-mortem retrieval of sperm in 1980 from a 30-year-old man who became brain dead after a car accident¹². The first pregnancy after Post-mortem retrieval of sperm was reported in 1998 and the subsequent birth was reported in March 1999¹³. The Cornell guideline (a set of guidelines addressing post-mortem sperm retrieval) emphasize retrieval must take place within 24 hours of death, cryopreservation must be available locally¹⁴. Posthumous collection of eggs is technically more complicated than posthumous collection of sperm. Even in living retrieval of eggs is medically

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complicated than retrieval of sperm. This is due to the need for advance preparation, such as ovarian stimulation with gonadotropin, which encourages the production of mature eggs, and collection of the eggs trans-vaginally, which occurs with a needle while the patient is under a local anesthetic¹⁵. Any woman undergoing a form of ART involving egg retrieval must first undergo at least two weeks of intensive hormone treatment in order to bring the number of ovum needed to maturity.¹⁶ Thus this process is technically complicated in dead woman. If the woman is in a PVS (permanent vegetative state), there exists higher possibility to extract the eggs¹⁷. Further, if cryopreserved eggs are to be used, then an additional third person- a surrogate is needed for the birth of child. This will separate the gestational and biological mother and will create confusion to the child.

In the year 2011, an Israeli court was asked to consider a rare case in which a 17 year-old girl who was struck by a car while crossing the street. Her parents sought legal permission to harvest their daughter's eggs for conception purposes. The parents were able to establish that their daughter wanted to have children at some point in her life. Only on that basis, the court granted the parents' request! Surprisingly, the court did not require a specific showing that the daughter would have wanted to have children conceived after her death¹⁸.

Judicial Response on Cryopreserved Embryos/ Gametes and Posthumous Use of Gametes

Legal issues relating to issues of parentage, ownership of gametes/ embryos are involved in the use of cryo preserved gametes and posthumous reproduction.

Israel

In 2002, an Israeli soldier, Keivan Cohen, was killed while on duty. Keivan's mother requested for extracting Keivan's sperm. Sperm was extracted and cryopreserved. When his mother tried to gain access to the sperm, the hospital refused, saying that only a spouse could make such a request. There was no written consent available where in Keivan has expressed his desire to father a child. However Keivan's mother Rachel Cohen insisted that during his lifetime, Keivan yearned to raise a family¹⁹. According to Israel's Attorney General (IAG) regulations of 2003, parents have no legal standing regarding the gametes of their deceased child. Keivan's parents challenged this decision in court and ultimately in 2007 won legal permission to use their son's sperm post mortem. The ruling recognized a parent's right over a dead child's sperm that permits the sperm to be used to impregnate a woman unknown to the sperm donor during his lifetime²⁰. Keivan's parents found a woman who agreed to be inseminated with their dead son's sperm and in 2013, the woman gave birth to Keivan Cohen's biological daughter eleven years after his death. In this case court not only allowed for sperm to be extracted and used, but also ordered the Ministry of interior to register any child born by posthumous conception as the children of deceased donor²¹.

In the year 2011, I Rosenblum (Founder and Executive Director, New Family Organization, Tel

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Aviv, Israel. She was also an Israeli Attorney who dealt Keivan's case) succeeded in developing the Biological will- a legal testament.

Rosenblum said

"Biological will documents the intended use or disposal of any individual's sperm, ova or embryos in case of death, incapacitation or infertility. I propose the "Biological Will" as a solution to the questions of gamete and embryo ownership, donor consent, legal parentage, and inheritance rights of posthumously-conceived children²²".

Israel is reported to be the world's pioneer in posthumous reproduction, with multiple precedents enabled by the Biological Will.

United Kingdom

R v. Human Fertilization and Embryology Authority, ex parte Blood,²³ was a complex case dealing with the issue of consent. Diane Blood Married Stephen Blood in 1991 and decided to start family. Tragically, Mr. Blood contracted meningitis. While in coma Mrs. Blood requested the hospital to surgically retrieve her husband's sperm. Hospital complied her request and frozen the sperm in sperm bank. Her husband died later and there was no written consent either on the extraction of sperm or the use of sperm post his death. Mrs. Blood has however informed that her husband has reportedly approved the idea of posthumous use of his sperms to have children before his illness. So when Mrs. Blood tried to use her husband's stored sperm samples for reproductive purpose, she was denied permission by UK Authority under the Human Fertilization and Embryology Act.²⁴ The Act prohibits the use of a man's sperm without his written consent. Authority also ruled that storing of gametes without consent is illegal. After winning an appeal, Mrs. Blood was allowed to ship the sperm to Brussels, Belgium where she carried out the medical treatment and finally gave birth to two children one in 1998 and the other in 2002. Later Stephen was recognized as father of Mrs. Blood's children- Liam Blood and Joel Blood are having normal life²⁵. This case was widely discussed in terms of consent.

United States

Gametes as property

In Hecht v. Superior Court²⁶, William Kane cryopreserved fifteen vials of his sperm before committing suicide and willed it to his girlfriend Hecht. In his will, he wished his girlfriend Hecht to use the sperm to impregnate herself, if she wished to have children from him. In a letter addressed to his two living children from his previous marriage, Kane writes,

"I address this to my children, because, although I have only two, Everett and Katy, it may be that Deborah [Hecht] will decide—as I hope she will—to have a child by me after my death. I've been assiduously generating frozen sperm samples for that eventuality.

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If she does, then this letter is for my posthumous offspring, as well, with the thought that I have loved you in my dreams, even though I never got to see you born. If you are receiving this letter, it means that I am dead—whether by my own hand or that of another makes very little difference. I feel that my time has come; and I wanted to leave you with something more than a dead enigma that was your father. I am inordinately proud of who I have been—what I made of me. I'm so proud of that that I would rather take my own life now than be ground into a mediocre existence by my enemies—who, because of my mistakes and bravado have gained the power to finish me²⁷.

Despite clear intentions, Mr. Kane's children protested to Ms. Hecht inheriting the sperm of their father, arguing that this would threaten the existing family by adding after-born children into their stable family²⁸. They appealed the court to have sperms destroyed and succeeded in convincing a trial court to issue such an order. However the appeals court reversed trial court order and granted Ms. Hecht the sperm and explicit wishes of the deceased was honored.

Gamete as property and must be equally distributed upon relationship dissolution.

British Columbia court has to decide whether cryo-preserved gamete is to be treated as property upon dissolution of relationship. J.C.M v A.N.A.²⁹ is a landmark Canadian court decision which ruled frozen sperm samples as property. J.C.M (Claimant) and A.N.A (respondent) a lesbian couple purchased sperm from a U.S sperm bank for the purpose of having children during their relationship. Both of them gave birth to children, A.N.A gave birth to their first child in the year 2000, and J.C.M. gave birth to child in 2002. The remaining 13 sperm straws (vials) were stored in fertility clinic. The couple separated in 2006 and entered into a separation agreement which involved custody and support of the children and the property division which they owned while they were couple. The 13 vials of sperm stored at the fertility clinic were forgotten. In the meantime, J.C.M started another relationship and intended to have child using the remaining sperm vials in order to retain the genetic similarity with other two children. J.C.M requested A.N.A about the interest in using the sperm vials, for which she was ready to pay. A.N.A responded that, the sperm vials should not be used and should be destroyed. J.C.M. brought the application seeking a declaration that the sperm was her sole property³⁰. The case turned on the issue of whether sperm could be treated as property³¹. The judge observed-

"The sperm has been treated as property by everyone involved in the transaction, from the donor to Xytex, Genesis and the parties. It has-been

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purchased; the parties have a right to deal with it. They have made use of it to their benefit. The respondent's moral objections to the commercialization of reproduction or the commoditization of the body seem to me to be too late. Certainly, they are interesting arguments for the respondent herself to make given she participated in purchasing and using a donation of sperm from an anonymous donor³².

BC court found that the gametes should be treated as property for the purpose of dividing them upon the dissolution of the spousal relationship of the parties. The parties are joint owners of the sperm they used in their successful attempts to conceive children³³.

Inheritance Rights of Posthumously Conceived Children

The couple in *Astrue v Capato*³⁴ case were married in 1999 and living in New Jersey. Shortly after the marriage, Robert Capato was diagnosed with cancer. He was informed by his physician that cancer treatment might make him infertile. Before chemotherapy treatment, Capato deposited his sperm at a fertility clinic to ensure that he would have biological children with wife, Karen Capato. In 2001, couple was blessed with a son by natural means, but they were unable to have additional children as Roberts condition deteriorated³⁵. In his "will" prepared three months before his death, named only his new born son and two children from his previous marriage as his beneficiaries³⁶. Robert died in 2002. Karen gave birth to twins eighteen months after Robert's death through IVF using Robert's cryopreserved sperm. Soon after the birth of her twins, Karen applied to social security administration for survivors for her twins. Her application was rejected as judge ruled that, at the time of death Robert was a domicile of Florida. According to Florida intestacy law (the rule governing disposition of a person's property if he or she dies without a will, including defining his or her heirs), posthumously conceived children are not entitled to inheritance rights unless the decedents will provided for such children³⁷. Social security rights were denied to Karen's twins. On appeal, The United States Court of Appeals reversed and ruled that the plain language of the Act entitles the Capato twins, whose parentage is not in dispute, to survivor benefits as they are biological children of married couple³⁸.

Indian Scenario

India has one of the highest growths in the ART centers and the number of ART cycles performed every year. IVF has enjoyed almost unregulated growth in the private sector. While the ICMR has formulated extensive guidelines, these have been awaiting ratification by the Indian Parliament for over a decade and still remain as mere guidelines. ICMR introduced a centralized registry which currently lists 416 clinics³⁹. According to estimates, 3000 plus clinics are operating in India and continue to vary widely.

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Post-Mortem Sperm Retrieval

First ever case of post-mortem sperm retrieval (PMSR) request was reported where a doctor of the All India Institute of Medical Sciences received a request from the widow of a man who had died on his way to the hospital. Doctors had to reject her request as there were no clear guidelines on post-mortem sperm retrieval⁴⁰. Then there was another report in which doctors at the trauma centre of AIIMS received a request from the family of a 22-year-old brain dead man. Upon counseling the family members agreed for organ donation, but insisted his sperm be retrieved and banked so it could be used for conception in the future⁴¹. Though India do not have any clear guidelines on post-mortem retrieval of sperms/ eggs, such request will be more in the coming years and it is better to have regulations in place.

Posthumous Reproduction

Times of India reported a case where the parents of a 27-year-old man, who died of brain tumor two years ago, used their unmarried son's cryopreserved semen extracted long before his death to have grandchildren. The semen was stored in a cryo bank in Germany before chemotherapy. After death the semen was shipped to India, and using a surrogate and egg donor, two children- a boy and a girl was born.⁴² The report says the deceased was her only son.

This report has shocked many and even medical fraternity too may not be happy with these kinds of developments. This is probably the first kind of case reported in India. While it is very well understandable that everyone has an interest in maintaining genetic continuity, wherein one very well wishes to leave a piece of themselves in the world. At the same time it must be ensured that the new life created is to be well taken care. One of the primary legal issues arising in this case is that of parentage. Can the deceased person and the surrogate be considered as the parent of this child? Has the deceased person consented? In the absence of spouse of the deceased, who will be given the parental rights? What will the birth certificate of the child carry? Can child inherit deceased father's property?

Though the young man before death has cryopreserved his sperm for future use, was he willing to father a child posthumously? How will it impact the child when he comes to know about the circumstances of his birth? Will the child have right to know about biological mother? What if tomorrow the surrogate mother or the egg donor claims rights over the baby?

These are some of the challenges that need to be addressed so as to protect the rights of children.

Though this is first of such case reported, more such cases may occur in future. And in the absence of any specific guidelines available for posthumous conception, it becomes more imperative to appropriately address this novel way of procreation to protect the rights of children at the same time to respect the dead.

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Should a surviving family member/ relative/ parents be permitted to have access to deceased's gametes for reproductive purposes when there is no evidence that the deceased would have authorized this procedure? Do the parents of the deceased son have the rights to demand the birth of grand children? These are not theoretical questions but are reported in various parts of the world.

Ethical issues

Posthumous assisted reproduction raises range of ethical issues. Key ethical issues relevant to posthumous reproduction include the four traditional pillars of medical ethics--autonomy, beneficence, non-maleficence, justice--as well as the stakeholders' rights and socio-cultural attitudes.⁴³ Ethical principles must be followed when executing posthumous reproduction. Respecting the dead is of utmost importance, while ensuring the welfare and protection of yet to be born child.

Concepts and hypothesis

The existing regulatory framework is not sufficient to address the complex legal issues arising out of the use of posthumous reproduction. So there is an urgent need to regulate the assisted reproduction and posthumous assisted reproduction in particular to protect the rights of children born by posthumous conception.

Findings

There are no internationally accepted guidelines on Posthumous assisted reproduction. Different countries have different approaches while dealing with cases of posthumous assisted reproduction. While countries like Germany, Sweden has got restrictive approach. In Germany, The Embryo Protection Act (ESchG), lists a number of misuses of assisted reproductive technology, which includes egg cell donation (i.e., the transfer of an unfertilized egg cell from one woman to another), surrogate motherhood, and the utilization of egg or sperm cells after the death of the owner.⁴⁴

Israel, US and certain Australian states approve posthumous conception provided the consent of deceased prior to death. In USA there is no federal law/ regulation on posthumous reproduction, instead individual states have their own statues in dealing with cases of posthumous reproduction. The field of ART itself is evolving, and to this is added posthumous conception. Legal issues involved mainly dealt with consent of the deceased, inheritance rights of children born through Posthumous reproduction, issue of parentage, weather parents of the deceased have right to use their children's stored gametes for having grandchildren and social security benefits for children born posthumously.

In Hecht v Superior court, even though Kane has explicitly given oral and verbal consent to Hecht to use his sperm for the purpose of procreation, Kane's living children battled with Hecht preventing her to use Kane's sperm as they feared that there will be another heir who could claim Kane's estate. Such kind of issues will create issues for posthumously born children who may already be suffering mental agony of planned orphan hood. If the deceased is

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single, then his relatives/ siblings will also battle for estate claim and the child may suffer.

Professional societies like European Society for Human Reproduction and Embryology and the American Society for Reproductive Medicine consider that posthumous sperm conception should only occur in the presence of explicit written consent from the deceased man. The Human Fertilization and Embryology Act 2008 of UK do not prohibit posthumous storage and use of sperm. It requires that patients consent is a pre-request for posthumous retrieval and storage of gametes.

The case of posthumous sperm retrieval and posthumous reproduction is not yet common in India; however there was report of request for PMSR retrieval in India and due to lack of regulation, the request was denied. Such request may occur in future. Cryopreservation has made possible to preserve fertility for medical and non-medical reasons. This will create more complications where a minor child undergoing chemotherapy stores the gamete, and later the parents of minor child seeking custody of those gametes to have genetic continuity of their offspring. Concept of egg freezing is gaining popularity even in India, where the child was born out of an egg that was frozen eight years ago⁴⁵. However India too does not have guidelines on posthumous sperm/ egg retrieval and posthumous reproduction.

Suggestions and Conclusion

As reproductive technology advances, so also posthumous assisted reproduction. However it is essential to address this issue for protecting the rights of children born through these techniques. As of now there is no proper law that deals with posthumous assisted reproduction. Only document available is ICMR's draft guidelines on assisted reproductive technology that also is not clear on posthumous assisted reproduction. To protect the right of children, it is essential to add special provisions in the draft bill such as- maximum limit up to which a gamete/ embryo can be cryopreserved. The bill should mention the time limit before which the child must be born. Bill should be clear on who has access to gametes in the event of death of gamete owner-surviving spouse/ parents/ or partner?

Single individuals, gay/ lesbian couples may in future turn to fertility clinics to make their baby dream reality. With a donated sperm, egg and surrogacy, three to five people can be engaged in the birth of baby – sperm donor, egg donor, surrogate, and intending parent/parents. This indeed raises questions like who will be the legal parent of the baby-gamete donor, surrogate mother or the one who raises the child. This will have psychological impact on children and there will be situation whereby court may have to deal with wrongful birth cases.

Further in case of cryopreservation of gametes from patients suffering from cancer or other illness the patient might not have intended to parent a child after death. In the absence of spouse, this becomes troubling situation as the request for posthumous reproduction comes from the parent of the deceased who see this intervention to carry the legacy of their child as or as the only way to become

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grandparents. Further, single individual would have wanted to have child from some specific person. He would not have wished to have child with any one. Moreover, he would not have wished to father a child posthumously. Clinics should be knowledgeable enough and must follow the local culture/ law of the land/ regulation provided by professional bodies, when undertaking these requests.

There are technical issues in cryopreservation of gametes. In *Jonathan Yearworth and Ors v. North Bristol NHS Trust*, [2009] EWCA Civ 37, semen samples were submitted by six men before undergoing chemotherapy. Somewhere in 2003, prior to any attempt to use any sperm, the amount of liquid nitrogen in the tanks in which it was stored fell below the requisite level. The semen thawed and perished irretrievably.

This was purely due to technical fault. Some of the freezing and storage processes may result in damages to the embryos/ gametes, which may not be immediately recognized and/or recognizable. Thus all the potential risk associated with freezing of embryos/ gametes must be there in consent form, and participating couples/ individuals must be informed about these risk to avoid future complications if any.

Practitioners must also provide patients with reliable information regarding the outcomes of assisted reproductive treatments following cryopreservation like live birth rates, outcomes for offspring conceived using the techniques, side effects of drugs etc so that they can make informed decisions about the storage of their tissues.

As seen in other jurisdictions - The Texas case of *Randy M. Roman v. Augusta N. Roman*, 1992 Tennessee case of *Davis v. Davis*, 1998 New York case of *Kass v. Kass*, cryopreserved embryo / gamete unfortunately have become subject to litigation in cases of divorce and/or separation of alternative life style couples. Consent form freezing of embryos should clearly clarify as to what to do with such unused embryos in the event of divorce/ separation. Further consent for storage of gametes needs to be amended. Currently the consent form say's in the event of death sperm may be discarded or donated to wife. It's not clear weather donor has any interest in becoming posthumous parent. Hence, it is suggested to mention clearly in the consent form that, in the event of death, the sperm may be used to impregnate wife if she so desires.

Cases similar to those reported from Pune are bound to arise with increasing frequency in coming days. In the absence of controlling regulations, courts will struggle to interpret the situation and the status of posthumously conceived children will probably be at stake. The Pune case of posthumously conceived child may strike the average Indian as exotic and rare, but the prospect for birth after the death of a genetic parent/parents are gaining momentum in India, and court should be ready to tackle these exotic cases.

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