Who abandons embryos after IVF?

Anthony PH Walsh
Royal College of Surgeons in Ireland

Olga M. Tsar
Royal College of Surgeons in Ireland

David J. Walsh
Royal College of Surgeons in Ireland

P M. Baldwin
Sims International Fertility Clinic

Lyuda V. Shkrobot
Royal College of Surgeons in Ireland

See next page for additional authors

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Who Abandons Embryos After IVF?

Introduction

The growing number of Irish patients attending for assisted reproductive treatments has been accompanied by an ever-increasing number of frozen extra embryos that IVF clinics must maintain in cryostorage. Most IVF patients with frozen embryos take this responsibility seriously, and painstakingly make their wishes known regarding the fate of their stored embryos during the informed consent process. This typically involves eventual embryo thaw and use in a frozen embryo transfer (FET) cycle. However, there is a very small group of patients who disappoint the relationship with their IVF clinic even though they leave frozen embryos behind. For these cases, there is no attempt to withdrew or modify the informed consent regarding the fate of their stored embryos. Embryos in this category are in limbo. They can be in this unclaimed, legally undefined, frozen state for many years and may be considered, for all practical purposes, abandoned. We propose that clinicians develop a policy to resolve it. Accordingly, we focused on the medical charts of patients abandoning their own embryos to describe clinical and demographic features and represent this unusual population.

Methods

This study sampled IVF treatment cycles at a private IVF centre from 2000 to 2008, as shown in Figure 1. For this study, only patients with at least one IVF cycle proceeding to embryo transfer were included in group A. Medical charts for patients with any embryos frozen during this period were advanced into group B. We next determined which cryopreservation cases had no contact with the clinic for >2yrs (group C). Cases were assigned to group D (abandoned) only when the following criteria were met: 1) an IVF patient with any cryopreserved embryo/s stored at our facility failed to respond to communication from our centre or made no contact with our clinic for >2yrs, and 3) the patient could not be located after a multi-modal outreach effort was undertaken. Clinic staff, office space and other resources were specifically designated to directly follow-up with all group C patients (by email, telephone, and regular mail) targeted first to home and then the work address, as listed in the medical record. If this failed, contact was attempted with the patients’ spouse/partner using this same approach. When this did not yield contact, communication with the notify in case of emergency person named in the medical record (if different than spouse/partner) was undertaken next. Registered mail (signature required) was used as appropriate; internet search portals and public database searches including marriage/death records were also performed for all group C patients. When successfully contacted, these group C patients were provided with three options for disposition of their cryopreserved embryos: 1) return to our clinic for FET, 2) maintain their embryos in offsite long term cryostorage, 3) make embryo/s available for anonymous donation to another couple, or 4) nominate some other arrangement for consideration. The remaining charts, representing patients who could not be contacted, comprised group D as abandoned embryo cases.

Results

A total of 3244 patients completed IVF treatment cycles (group A) and 1159 had embryos frozen (group B) during the study period. Groups C and D were comprised of 292 and 11 patients, respectively (Figure 1). All group D patients were married, and mean (±SD) ages were 34.3 ± 5.4 and 42.8 ± 7.9yrs for females and males, respectively. The absolute age difference between wives and husbands in group D was 8.5 years, reflecting that the husband was 18.4 years older than the wife in 96.4% of cases. None of these couples had a prior livebirth before their initial IVF consultation, but 4 of 11 had at least one prior pregnancy together. Donor oocytes were utilised in 27.3% of group D patients. None of the patients in group D sought additional counseling of gave any evidence of a marital relationship change. A summary of selected demographic characteristics for group D patients is given in Table 1. In group D, 5/11 patients conceived after the first FET cycle (45.5%). A sufficient number of embryos was produced in the initial FET cycle to permit cryopreservation for 7/11 of these patients (63.6%). The annualised relationship between overall IVF cycle volume and proportion of cases with cryopreserved embryos during the study period is shown in Figure 2; reproductive trajectory for the 11 cases in group D is depicted in Figure 3.

Figure 1: Schematic of patient distribution in an urban referral IVF centre showing relationship among all cases completed during study period (A), patients with cryopreserved embryos (B); patients with whom no contact could be established for at least two years (C), and patients who abandoned their embryos (D).

Discussion

How decisions are made about non-transferred embryos has attracted considerable attention. As the number of abandoned embryos from IVF accumulates, their fate urgently requires clarification. We propose that clinicians develop a policy consistent with relevant Irish Constitutional provisions to address this medical dilemma.
study, although recent debates do not seem to reflect the full spectrum of values considered by fertility patients.

A recent study of IVF patients expecting to discontinue embryo cryostorage found no significant difference in the choice selected between patients who achieved a pregnancy with delivery compared with those who did not. 1

Another study reported about 30% of couples would donate their embryos to research and 90% of respondents indicated that they would seek outside help to decide the fate of their embryos. 2 Occasionally patient interest in placing embryos into research protocols can decline after completing treatment, suggesting a need for a two-stage process to obtain fully informed consent. 3 If fertility patients are these are difficult decisions; sometimes they want options that are not even available to them 4

In contrast, there has been almost no exploration of the vexing problem of human embryo abandonment. This research focused on frozen embryos derived from patients who could not be located; we were unable to identify any feature in this group which could have been used to predict subsequent embryo abandonment. These data underscore the apparent randomness of the clinical problem of embryo abandonment. Although multiple demographic and clinical features of IVF patients failing to claim their surplus embryos are presented here, other questions remain. For example, could the observed abandonment be related to an inability to pay the storage bill? This possibility required careful consideration, as there is some expense associated with embryos freezing and storage. By convention, IVF patients are not typically billed for this service (1000 per annum at our centre) until after the first year of storage. In countries without universal government health coverage for fertility treatment (e.g., Ireland), patients are expected to self-fund their IVF. Personal economic forces might influence how patients regard frozen embryos depending on the contribution made by health insurance, which in other jurisdictions can specifically exclude coverage for preserving and storing embryos. 5 Like much in the province of clinical reproductive medicine, the concept of embryo abandonment in Ireland awaits a formal legal definition. Although the legal definition of human embryos among all Irish IVF clinics has been relatively consistent over the years, a specific sequence of steps is taken and still the right owner cannot be located. This possibility is discussed at the time written informed consent for IVF is obtained, and IFP patients in the U.K. are advised that embryo destruction will result if the patient becomes unreachable after 5yrs. This law therefore lawfully permits IVF clinics in the U.K. to thaw without transfer (allow to perish) any embryos left in their storage facility for an extended time.

Destroying abandoned embryos in Ireland raises important regulatory and constitutional issues because Medical Council guidelines expressly prohibit the destruction of embryos and intentional destruction of life in its life already formed. The practice of destroying abandoned embryos in Ireland is complicated by interpretations of Article 40.3.3 of the Irish Constitution, which acknowledges the right to life of the unborn and, with due regard to the equal right to life of the mother, guarantees in its laws to respect, and, as far as practicable, by its laws to defend and vindicate that right. Nevertheless, it is also true that no law or guideline specifically addresses embryo abandonment. Therefore, it could be suggested that disposition of unclaimed embryos should follow the same procedure already used to determine custody for abandoned infants. Although key distinctions must be made between frozen embryos and live offspring, it might be argued that some aspects of orphaned infants are shared with abandoned embryos from IVF. For example, it is the parent/IVF patient who unilaterally elects to terminate the relationship in both scenarios, and the inferior (dependent) party is incapable of exercising any role in determining their individual fate. Accordingly, the tragedy of embryo abandonment comes to be viewed as today's orphaned infant on the doorstep discrimina from pregnancies past.

In USA, the American Society for Reproductive Medicine discourages the donation of human embryos deemed to abandoned to other couples without express consent. Instead, the embryo (rather than infant) at the centre of this model would allow the basic application of a familiar socio-legal framework in Ireland to manage the problem of embryo abandonment. It could be suggested that disposition of unclaimed embryos should follow the same procedure already used to determine custody for abandoned infants. Although key distinctions must be made between frozen embryos and live offspring, it might be argued that some aspects of orphaned infants are shared with abandoned embryos from IVF. For example, it is the parent/IVF patient who unilaterally elects to terminate the relationship in both scenarios, and the inferior (dependent) party is incapable of exercising any role in determining their individual fate.

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Could this approach work in Ireland? Clinicians, ethicists, social workers and legal scholars need to work collaboratively to establish uniform guidelines defining and addressing embryo abandonment. As providers of reproductive medical services, IVF physicians should guide this effort. It would be ideal if IVF clinics made abandoned embryos available for donation in a safe, confidential and anonymous fashion, to other medically-eligible couples willing to undergo embryo transfer. Published reports describing this in Ireland have yet to appear, but reports describing this in Ireland have yet to appear, but such treatment would be fully compliant with Medical Council guidelines which recognise and encourage the therapeutic benefit of embryo donation. Jurisdictions have already enacted statutes to address the challenges of embryo abandonment, and pending in the U.K., a provision for donated embryos is not necessarily a challenge unique to our country.

In Ireland, the legal scholars need to work collaboratively to establish uniform guidelines defining and addressing embryo abandonment. As providers of reproductive medical services, IVF physicians should guide this effort. It would be ideal if IVF clinics made abandoned embryos available for donation in a safe, confidential and anonymous fashion, to other medically-eligible couples willing to undergo embryo transfer. Published reports describing this in Ireland have yet to appear, but such treatment would be fully compliant with Medical Council guidelines which recognise and encourage the therapeutic benefit of embryo donation. Jurisdictions have already enacted statutes to address the challenges of embryo abandonment, and pending in the U.K., a provision for donated embryos is not necessarily a challenge unique to our country.

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