RECRUITMENT OF DESIGNATED (KNOWN) SEMEN DONORS: REVIEW OF APPLICATION PROCESS
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ABSTRACT

Indications for designated donor applications are outlined in the table. Heterosexual recipient couples mainly chose a heterosexual donor who was a family member related to the male partner (16/17 cases). Single women chose only a heterosexual donor, while lesbian recipient couples mainly nominated a donor who has same-sex relationships (9/9 cases).

The mean age for designated donor applicants was 38.4 ± 11.9 years (range: 21 - 75). 3/46 donors were professionally employed, while the remainder 2 were students; 396 donors had fathered children and 14/36 donors were married.

A considerable number of donors (10/36) were not based in Toronto. These donors came from Canadian provinces other than Ontario, Australia, Denmark, Germany, India, Iran, and the United States.

The average duration from the initial visit until the specimens release was 10 months (range: 7 – 16). The average number of onsite visits made by the designated donor was 3 visits (range: 1 – 6).

The number of semen vials collected was 13.3 ± 6.6 with 8.9 ± 8.3 motile sperm in each post-thaw. In one case, epididymal sperm aspiration was used to retrieve spermatozoa due to prior history of vasectomy.

In the raw ejaculates sperm parameters were, concentration: 36 ± 24.1 million/mL; motility: 46.1 ± 18.0%, and morphology: 16.1 ± 13.0% normal forms.

In finalized applications (n=28), donor recruitment was successfully completed up to the stage of sample release from quarantine in 75% of cases (21/28). Eight applications remain pending. All released samples have been used in the context of assisted reproductive techniques except one which remains to date in storage.

Poor semen quality was the reason for discontinued designated donor applications in 47 cases. Donor availability, medical history and results of infectious disease screening accounted for the other rejected applications.

The donor semen special access program (DSSAP) was required to release samples in 11/21 completed applications. This special authorization was needed in 7 cases due to the donor having same-sex relationships and in 4 cases due to donor’s age being more than 40 years.

Table. Indications for using designated (known) semen donor.

<table>
<thead>
<tr>
<th>Indication</th>
<th>Number of applications (%)</th>
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<tbody>
<tr>
<td>Heterosexual couple — male partner infertility</td>
<td>17 (47.3)</td>
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<tr>
<td>Single women</td>
<td>7 (19.4)</td>
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<tr>
<td>Lesbian couple</td>
<td>7 (19.4)</td>
</tr>
<tr>
<td>Traditional surrogacy</td>
<td>3 (8.3)</td>
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<tr>
<td>Co-parenting agreement</td>
<td>2 (5.6)</td>
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</tbody>
</table>

CONCLUSIONS

The designated (known) semen donor program is a feasible option that offers many advantages in many distinctive cases. The program may include donors with less optimal sperm quality as well as those in need of surgical sperm retrieval.

The designated (known) semen donor program also allows the inclusion of donors who do not live in Toronto and the release/distribution of samples to other clinics located in other Canadian provinces.

Different indications exist for the use of a designated (known) semen donor. There is an evident correlation between the indication for using a designated (known) semen donor and the donor’s sexual orientation as well as his relation to the recipient.

Many of the designated (known) semen donor applicants fit within the exclusion criteria defined by the regulations for recruiting a semen donor in Canada. The donor semen special access program (DSSAP) is frequently used to allow the inclusion of these cases. This is the only venue that allows men who had same-sex relationships or men above the age of 40 years to become semen donors.

Designated (known) semen donor applications are characterized by very high success rates leading to recruitment rates that exceed those established for the anonymous donor program.

Recipients should be counseled regarding the length of the process in order to avoid negative impacts on their management plan.