## **ARTICLE IN PRESS**





#### **Article**

### Shared motherhood IVF: high delivery rates in a large study of treatments for lesbian couples using partnerdonated eggs

D Bodri, S Nair, A Gill, G Lamanna, M Rahmati, M Arian-Schad, V Smith, E Linara, J Wang, N Macklon, KK Ahuja \*

The London Women's Clinic, 113-115 Harley Street, London, W1G6AP, UK



Daniel Bodri completed his medical speciality training in Hungary and worked in renowned fertility centres in France, Spain, Japan and UK. He gained MSc and PhD degrees from the Universities at Leeds and Barcelona, respectively. Ovarian stimulation, egg donation, time-lapse imaging and evidenced-based medicine constitute his main areas of research.

#### **KEY MESSAGE**

Shared motherhood IVF is an increasingly requested assisted reproductive technique among lesbian couples. The autonomy of lesbian patients is increasingly being respected even though complex IVF treatment is mostly carried out for non-medical indications. Ovarian stimulation with single blastocyst transfer provides a uniquely safe and highly efficient treatment.

#### ABSTRACT

Shared motherhood IVF treatment is becoming increasingly accepted among assisted reproductive techique practitioners and patients in Europe, although data on its overall efficiency remain scarce. This 6-year retrospective study from a single, private, UK HFEA-regulated centre included consecutive lesbian couples (n = 121) undergoing shared motherhood IVF treatment (141 cycles). Recipients were more parous and had undergone more previous intrauterine insemination and IVF treatments than donor partners, who had slightly higher ovarian reserve markers than recipients. Indications in most cycles (60%) were non-medical. Most (79%) egg-providers were stimulated with gonadotrophin releasing hormone antagonist protocol, and no moderate or severe cases of ovarian hyperstimulation syndrome (0HSS) arose. A total of 172 fresh and vitrified-warmed embryo transfers were carried out: 70% at the blastocyst-stage and 58% involved a single embryo. Cumulative live birth rate per receiver was 60% (72/120), and twin delivery rate was 14% (10/72). Perinatal outcome parameters were better for singleton than twin pregnancies, although the latter also achieved generally favourable outcomes. No significant difference in cumulative outcomes were found between synchronized and non-synchronized cycles. Shared motherhood IVF combines ovarian stimulation with single blastocyst transfer to provide a safe and effective treatment modality offering reassuring obstetrical and perinatal outcomes.

© 2017 Reproductive Healthcare Ltd. Published by Elsevier Ltd. All rights reserved.

E-mail address: kamal.ahuja@londonwomensclinic.com (K.K. Ahuja).

https://doi.org/10.1016/j.rbmo.2017.11.006

1472-6483/© 2017 Reproductive Healthcare Ltd. Published by Elsevier Ltd. All rights reserved.

Oral presentation given at the 33rd Annual Meeting of the European Society of Human Reproduction and Embryology, Geneva, 2-5 July, 2017.

<sup>\*</sup> Corresponding author.

#### Introduction

Over recent decades, changes in attitudes towards lesbian couples (as well as unmarried single people and gay couples) have meant that assisted reproduction technique treatment has become increasingly accessible to them. In the UK, the right to civil partnership for same-sex couples was recognized in 2004, and same-sex marriage was introduced in 2014. In 2008, amendments were made to the Human Fertilisation and Embryology Act removing previous requirements for 'a child's need for a father' and allowing female partners to become legal parents. Subsequent equality legislation outlawed discrimination based on Protected Characteristics and prohibited refusal of fertility treatment based on sexual orientation (Priddle, 2015). In Europe and the USA, some professional bodies have issued concordant guidelines recognizing the right to access fertility treaments for singles, lesbian and gay couples as well as transgender people (Ethics Committee of American Society for Reproductive Medicine, 2013: De Wert et al., 2014).

Shared motherhood IVF treatment was first described in 2010 (Marina et al., 2010) and has generated extensive ethical debate. Whereas donor insemination or IVF with donor sperm (if a medical indication is present) was deemed acceptable for lesbian patients, for some practitioners and clinics, intra-couple egg donation for non-medical reasons was considered to be non-justifiable, risky and not

cost-effective. According to a number of leading ethicists, however, this reasoning is weak and does not justify undermining autonomy by refusing to treat lesbian patients who wish to share their biological parenthood and accept undergoing a more complex procedure (Dondorp et al., 2010; Zeiler and Malmquist, 2014). Currently, shared motherhood IVF treatment can only be practised without restriction in a few European countries, including Spain, from where the first published series has originated. Extensive ethical debate has led to it becoming gradually accepted in others, such as Belgium and Sweden; however, in many, such as France, Germany and Italy, shared motherhood IVF is either prohibited or discouraged (Table 1).

The current terminology describing shared motherhood IVF treatment is relatively heterogeneous, reflecting its unique clinical context. Although the term 'intra-couple or intra-partner egg donation' correctly describes the medical procedure itself, it might be perceived as too medical for lesbian couples who are not donating or receiving their own eggs for the same reasons as participants of altruistic egg-donation programmes (Woodward and Norton, 2006). Similarly, the uniquely Spanish acronym ROPA/REPA, established by the Barcelona group, which was the first to publish its experience, also underlines the medical aspect of 'receiving eggs/embryos from the partner' (Marina et al., 2010) and might be difficult to adopt in the English-language medical literature. The original term of 'Co-IVF' (or the similar sounding 'Reciprocal IVF') was coined by a US group emphasizing an egual contribution to the IVF process (Yeshua et al., 2015).

Table 1 – Regulation of family law, assisted reproductive technique access and shared motherhood IVF for lesbians across the
European Union (as of October 2017).

Denmark   ME, 2012   Singles/couples   No	Region	EU countries (28)	Family law, (year coming into effect)	Access to assisted reproduction techniques (single women/lesbian couples)	Shared motherhood IVF
Finland   ME, 2017   Singles   Yes	Northern- and Western (9)	Belgium	ME, 2003	Singles/couples	Yes
France   ME, 2013   No   No   No		Denmark	ME, 2012	Singles/couples	No
Ireland   ME, 2015   Singles/couples   Yes		Finland	ME, 2017	Singles	Yes
Luxembourg         ME, 2015         Singles/couples         No           Netherlands         ME, 2001         Singles/couples         Yes           Sweden         ME, 2009         Singles/couples         No           UK         ME, 2013–2014         Singles/couples         Yes           Southern (6)         Cyprus         RP, 2015         Singles         No           Greece         RP, 2016         No         No         No           Italy         RP, 2016         No         No         No           Matta         ME, 2017         No         No         No           Portugal         ME, 2010         Singles/couples         Yes           Central (3)         Austria         RP, 2010         Couples         No           Central (3)         Austria         RP, 2010         Couples         No           Central (4)         Bulgaria         No         No         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Eastern (10)         Bulgaria         No         Singles         No           Eastern (10)         Bulgaria         No         No         No           Lithuaria         <		France	ME, 2013	No	No
Netherlands   ME, 2001   Singles/couples   Yes		Ireland	ME, 2015	Singles/couples	Yes
Sweden   ME, 2009   Singles/couples   No     UK   ME, 2013–2014   Singles/couples   Yes     Cyprus   RP, 2015   Singles   No     Italy   RP, 2016   No   No     Italy   RE, 2017   No   No   No     Portugal   ME, 2010   Singles/couples   Yes     Portugal   ME, 2010   Singles/couples   Yes     Spain   ME, 2010   Singles/couples   Yes     Central (3)   Austria   RP, 2010   Couples   No     Czech Republic   L-RP, 2006   No   Rogermany   ME, 2017   Singles/couples   No     Eastern (10)   Bulgaria   No   Singles   No     Croatia   RP, 2014   Singles/couples   No     Estonia   L-RP, 2016   Singles   No     Hungary   RP, 2019   Singles   No     Latvia   No   Singles   No     Latvia   No   Singles   No     Latvia   No   No   No   No     Romania   No   No   No   No     Romania   No   No   No   No   No     Romania   No   No   No   No   No     Slovakia   No   No   No   No   No     Romania   No   No   No   No   No   No     Romania   No   No   No   No   No     Romania   No   No   No   No   No   No     Romania   Romania   No   No   No   No   No     Romania   No   No   No   No   No     Romania   No   No   No   No   No   No   No     Romania   No   No   No   No   No   No   No     Romania   No   No   No   No   No   No   No   N		Luxembourg	ME, 2015	Singles/couples	No
Southern (6)         UK         ME, 2013–2014         Singles/couples         Yes           Southern (6)         Cyprus         RP, 2015         Singles         No           Greece         RP, 2016         No         No           Italy         RP, 2016         No         No           Malta         ME, 2017         No         No           Portugal         ME, 2010         Singles/couples         Yes           Spain         ME, 2005         Singles/couples         No           Central (3)         Austria         RP, 2010         Couples         No           Central (3)         Austria         RP, 2010         Couples         No           Central (3)         Austria         RP, 2010         Couples         No           Central (3)         Austria         RP, 2010         No         No           Eastern (10)         Bulgaria         No         No         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Eastern (10)         Bulgaria         No         No           Eastern (10)         Bulgaria         No         No           Latvia         RP, 2016         Singles		Netherlands	ME, 2001	Singles/couples	Yes
Southern (6)         Cyprus         RP, 2015         Singles         No           Greece         RP, 2015         Singles         No           Italy         RP, 2016         No         No           Malta         ME, 2017         No         No           Portugal         ME, 2010         Singles/couples         Yes           Spain         ME, 2005         Singles/couples         No           Central (3)         Austria         RP, 2010         Couples         No           Cerb Republic         L-RP, 2006         No         No         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Hungary         RP, 2014         Singles/couples         No           Hungary         RP, 2016         Singles         No           Latvia         No         Singles         No           Lithuania         No         No         No           Poland         No         No         No           Romania         No         No         No           No         No         No         No <td rowspan="2"></td> <td>Sweden</td> <td>ME, 2009</td> <td>Singles/couples</td> <td>No</td>		Sweden	ME, 2009	Singles/couples	No
Greece   RP, 2015   Singles   No   No   No   Italy   RP, 2016   No   No   No   No   Malta   ME, 2017   No   No   No   Portugal   ME, 2010   Singles/couples   Yes   Spain   ME, 2005   Singles/couples   Yes   Spain   ME, 2005   Singles/couples   Yes   Spain   ME, 2005   Singles/couples   No   No   Czech Republic   L-RP, 2006   No   No   No   Germany   ME, 2017   Singles/couples   No   No   Singles   No   Singles   No   Singles   No   Singles   No   No   Singles   No   No   No   No   No   No   No   N		UK	ME, 2013-2014	Singles/couples	Yes
Italy	Southern (6)	Cyprus	RP, 2015	Singles	No
Malta         ME, 2017         No         No           Portugal         ME, 2010         Singles/couples         Yes           Spain         ME, 2005         Singles/couples         Yes           Central (3)         Austria         RP, 2010         Couples         No           Czech Republic         L-RP, 2006         No         No         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Eastern (20)         Bulgaria         No         Singles         No           Eastern (20)         Bulgaria         No         Singles         No           Eastern (20)         Bulgaria         No         Singles         No           Eastern (20)         Estonia         L-RP, 2014         Singles         No           Hungary         RP, 2009         Singles         No           Latvia         No         No         No           Poland         No         No         No           Poland         No         No         No           Romania         No         No         No           Romania         No         No         No           Romania         No		Greece	RP, 2015	Singles	No
Portugal ME, 2010 Singles/couples Yes Spain ME, 2005 Singles/couples Yes Central (3) Austria RP, 2010 Couples No Czech Republic L-RP, 2006 No No Germany ME, 2017 Singles/couples No Eastern (10) Bulgaria No Singles Croatia RP, 2014 Singles Croatia RP, 2016 Singles No Estonia L-RP, 2016 Singles No Hungary RP, 2009 Singles No Latvia No Singles No Latvia No N		Italy	RP, 2016	No	No
Spain ME, 2005 Singles/couples Yes  Central (3) Austria RP, 2010 Couples No Czech Republic L-RP, 2006 No Germany ME, 2017 Singles/couples No Eastern (10) Bulgaria No Croatia RP, 2014 Singles/couples No Estonia L-RP, 2016 Singles No Hungary RP, 2016 Singles No Latvia No Singles No Latvia No N		Malta	ME, 2017	No	No
Central (3)         Austria         RP, 2010         Couples         No           Czech Republic         L-RP, 2006         No         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Croatia         RP, 2014         Singles/couples         No           Estonia         L-RP, 2016         Singles         No           Hungary         RP, 2009         Singles         No           Latvia         No         Singles         No           Lithuania         No         No         No           Poland         No         No         No           Romania         No         No         No           Slovakia         No         No         No		Portugal	ME, 2010	Singles/couples	Yes
Czech Republic         L-RP, 2006         No         No           Eastern (10)         Bulgaria         No         Singles/couples         No           Croatia         RP, 2014         Singles/couples         No           Estonia         L-RP, 2016         Singles         No           Hungary         RP, 2009         Singles         No           Latvia         No         Singles         No           Lithuania         No         No         No           Poland         No         No         No           Romania         No         No         No           Slovakia         No         No         No		Spain	ME, 2005	Singles/couples	Yes
Bulgaria No Singles No Croatia RP, 2014 Singles No Estonia L-RP, 2016 Singles No Hungary RP, 2009 Singles No Latvia No Singles No Lithuania No No Poland No No Romania No No Slovakia No N	Central (3)	Austria	RP, 2010	Couples	No
Eastern (10)  Bulgaria  RP, 2014  Singles/couples  No Estonia  L-RP, 2016  Singles  No Hungary  RP, 2009  Singles  No Latvia  No No No No No Poland  No		Czech Republic	L-RP, 2006	No	No
Croatia RP, 2014 Singles/couples No Estonia L-RP, 2016 Singles No Hungary RP, 2009 Singles No Latvia No Singles No Lithuania No No No No Poland No No No No Romania No No No No		Germany	ME, 2017	Singles/couples	No
Estonia L-RP, 2016 Singles No Hungary RP, 2009 Singles No Latvia No Singles No Lithuania No No No No Poland No No No No Romania No No No No Slovakia No No No No	Eastern (10)	Bulgaria	No	Singles	No
Hungary RP, 2009 Singles No Latvia No Singles No Lithuania No No No No Poland No No No No Romania No No No No Slovakia No No No		Croatia	RP, 2014	Singles/couples	No
Latvia No Singles No Lithuania No No No No Poland No No No No Romania No No No No Slovakia No No No		Estonia	L-RP, 2016	Singles	No
Lithuania No		Hungary	RP, 2009	Singles	No
PolandNoNoRomaniaNoNoNoSlovakiaNoNoNo		Latvia	No	Singles	No
Romania         No         No         No           Slovakia         No         No         No		Lithuania	No	No	No
Slovakia No No No		Poland	No	No	No
		Romania	No	No	No
Slovenia RP, 2017 No No		Slovakia	No	No	No
		Slovenia	RP, 2017	No	No

Adapted from 2017 Annual Review of ILGA-Europe (the European Region of the International Lesbian, Gay, Bisexual, Trans and Intersex Association): https://rainbow-europe.org; and by inquiring at ESHRE country representatives.

EU, European Union ME, marriage equality, RP, registered partnership, L-RP, limited registered partnership.

Please cite this article in press as: D. Bodri, S. Nair, A. Gill, G. Lamanna, M. Rahmati, M. Arian-Schad, V. Smith, E. Linara, J. Wang, N. Macklon, K.K. Ahuja, Shared motherhood IVF: high delivery rates in a large study of treatments for lesbian couples using partner-donated eggs, Reproductive BioMedicine Online (2017), doi: 10.1016/j.rbmo.2017.11.006

### Download English Version:

# https://daneshyari.com/en/article/8783922

Download Persian Version:

https://daneshyari.com/article/8783922

<u>Daneshyari.com</u>