

PAPER DETAILS

TITLE: Ethical Aspects of Uterus Transplantation

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PAGES: 84-87

ORIGINAL PDF URL: <https://dergipark.org.tr/tr/download/article-file/1940073>

Ethical Aspects of Uterus Transplantation

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<p>Corresponding Author Çiğdem Müge HAYLI</p> <p>DOI https://10.48121/jihsam.986632</p> <p>Received 24.08.2021</p> <p>Accepted 23.12.2021</p> <p>Published Online 27.04.2022</p> <p>Key Words Infertility Uterine Transplantation Ethics</p>	<p>ABSTRACT</p> <p><i>Important developments in transplantation in recent years have brought uterine transplantation to the agenda. Transplantation has been a glimmer of hope for many patients with uterine factor infertility. Most women only want to have a child they gave birth to. However, the most important feature that distinguishes uterus transplantation from other transplantation surgeries is that it is performed not to save people's lives, but to increase the quality of life. This situation raises many question marks. Despite the medical and scientific complexity that uterine transplantation has created in the medical world of our time, ethical questions about it perhaps pose more challenges. This review was made to reveal the ethical dimension of uterus transplantation.</i></p>
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INTRODUCTION

Uterus Transplantation

The history of uterine transplantation in experimental animals began with studies carried out in the 1960s and 1970s and became widespread in the 20th century (Brannstrom et.al., 2003). That they used female dogs to perform the first successful uterine autotransplantation. Despite subsequent breakthroughs, uterine transplant research appears to have lost relevance with the onset of in-vitro fertilization in the 1970s, with similar experiments not occurring until 2000 (Lefkowitz, 2012).

UTx (Uterine Transplantation) is currently the subject of research in many centers in the USA and Europe. Uterine transplantation attempts have been made in rabbits, sheep, non-human primates, and mice with varying success rates (Brannstrom et.al., 2010). It has been prepared for human experiments in line with uterine transplantation studies in animals. The feature that distinguishes his study from Del Pire's study is that he stated that uterine grafts can be obtained from living donors (mother or sibling) who are closely related to the recipient, with appropriate donor tissue compatibility. It is stated that with such a graft, the recipient can avoid some of the risks associated with anti-rejection drugs, while at the same time trying a natural pregnancy and not requiring a postpartum hysterectomy. Theoretically, the Brannström approach has been defined as a permanent uterine graft (Mirkes, 2008). At the same time, thousands of women have undergone uterine transplantation, based on fecundity rates. It is anticipated that he may be a candidate for Ongoing studies, uterine transplantation potential buyers who are on the "waiting list", who have registered for; Rokitansky syndrome, revealed that she had a prior hysterectomy, endometriosis, and cervical cancer (Nair, 2008).

Over the past three years, scientists have made great efforts to address existing infertility problems. Indeed, achievements and advances in this area have had a significant clinical impact. The first successful uterus transplant in the world, Akdeniz University Medical Faculty Hospital Plastic Reconstructive Surgery Department Head Assoc. Dr. It was performed by Ömer Özkan and his team, but the pregnancy did not continue. Uterine transplantation from cadaver was performed in a 21-year-old patient with congenital absence of uterus. Pregnancy was terminated at the 8th week after transplantation, when the heartbeat of the embryo was not monitored (Catsanos et.al., 2012).

Uterus Transplantation Indications

In the last 10 years, there have been significant developments in the treatment of both male and female infertility. It is estimated that 8% to 30% of

couples of reproductive age in the Western world are infertile (Brannstrom et.al., 2003), while this rate is between 10-20% in Turkey (Kılıç et.al., 2011). It is stated that approximately 40% of the couples seeking medical consultation in infertility have female causes. The introduction of IVF treatment has led to the treatment of causes of female infertility, such as ovulatory disorders and tubal factors. However, most of the underlying abnormalities in uterine factor infertility are not treatable. In the UK alone, it is estimated that 15,000 women (3% of infertile women) are infertile due to uterine factor (Diaz et.al., 2010; Sieunarine et., 2005). It may be due to congenital mullerian anomalies such as infertility, agenesis, hypoplasia due to uterine factor, or it may be acquired later (Brannstrom et. al., 2003). It is a congenital aplasia of the upper 2/3 of the uterus and vagina. In MRKH cases, the external genitalia has a normal appearance, and secondary sexual characteristics develop normally in adolescence, but it can lead to primary amenorrhea (Üstüner et.al., 2008; Bedaiwy et.al., 2010).

Importance of Uterus Transplantation

Although reproductive potential may seem meaningless for some individuals, it is absolutely vital for some individuals. Therefore, infertility can be devastating for many women (Catsanos et.al., 2012). Although advances in ART have helped many infertile couples achieve their dreams, until recently; Women with uterine factor infertility had two options: adoption and gestational surrogacy. Currently, uterus transplantation constitutes a third option (Nair et.al., 2008). Uterus transplantation and tissue transplantation has become an accepted part of modern medicine in the last fifty years (Catsanos et.al., 2012). Organ transplantation is performed as a life-saving approach in critically ill patients due to the complications of organ rejection and post-transplant immunosuppressive treatments (Nair et.al., 2008). For this reason, transplantation is considered by many of us simply as a life-saving procedure. However, besides being a life-saving alternative, transplantation surgery also increases the quality of life of patients (Altchek, 2003).

The uterus provides both menstruation and the formation of pregnancy in a woman. Menstruation may not be important to many women, but the ability to conceive is very important. For women, childbearing fills a deep emotional and social need. For many women, the desire to become pregnant is thought to be an innate trait with evolutionary biology. But this desire also has a strong social component (Altchek, 2003).

In Turkish society, the child is an indispensable element with economic, psychological and social

value dimensions. Childlessness is seen as a humiliating situation (Brännström ve ark., 2007). Our society; The high expectations of married couples to have children increase the importance of uterus transplantation even more (Kılıç et.al., 2011).

Uterus Transplantation and Ethics

There are ethical, social and legal problems with uterus transplantation (Kisu et.al., 2011). Therefore, issues related to the donor (cadaver or living donor) with the current family, the recipient as well as the spouse of the prospective recipient and the child to be born should be addressed, and ethical principles should be thoroughly analyzed considering the benefits and risks associated with uterine transplantation (Díaz-García et.al., 2012).

Another critical question is to identify a suitable donor for uterine transplantation (Kisu et.al., 2011). It is thought that the mother or an elderly sister will be the most suitable living donor, and it is stated that in this case, the probability of suitable tissue compatibility will increase (Fageeh et.al., 2002).

Although the clinical significance of living without a uterus is minor, uterine donation has emotional and practical consequences such as effects on gender, loss of identity, and sexuality. There are data suggesting that after hysterectomy, women may experience increased sexual dysfunction and decreased sexual satisfaction. For such an important and irreversible decision, the potential donor should be given time to think and given comprehensive information about the delivery of a healthy uterus; make sure donors make informed, autonomous decisions (Lefkowitz et.al., 2015; Fageh et.al., 2002).

The risks taken by the donor would be similar to hysterectomy, which is the most common surgical procedure in women today. It is extremely important that the donor is aware of these risks, that the potential risks are evaluated during interviews prior to transplant donation, and that they are understood by the individual (Brannstrom et.al., 2003). To maximize childbearing ability, the ideal living donor is someone of reproductive age with no history of uterine disease or trauma. A woman of reproductive age may agree to be a uterus transplant donor. If he takes this decision,

the realization of the uterine transplant will be completely irreversible. In such a case, it should not be forgotten that the woman may regret it at a later date. There are also psychological risks associated with uterine transplantation. The complex relationship that develops between the donor and the recipient may contribute to their embarrassment, anxiety, and more guilt, including a healthy donor. In the light of this, it is even more important to secure the principle of not knowing the identities of the donor and the recipient in cases where the donor is not a friend or family member or is not wanted to be known (Lefkowitz et.al., 2012).

Until recently, surrogacy was the only option for patients with absolute uterine factor infertility to become genetic mothers. However, in surrogacy, a woman can become a mother genetically and socially, but pregnancy cannot be achieved (Üstüner et.al., 2008).

Motherhood is believed to be the nurturing of the baby in the uterus and the experience of birth. For this reason, it is thought that maternal feelings are more nurturing in uterus transplantation than surrogacy, because the woman will have experienced both pregnancy and childbirth. In addition, it will strengthen mother-baby interaction and communication after birth (Golombok et.al., 2006).

From this point of view, it is thought that uterus transplantation will increase mother-infant interaction, and adaptation to the role of motherhood will be more than surrogacy. At the same time, surrogacy requires the existence of a relationship of trust between all parties involved. The sense of trust required for such arrangements is easily shaken due to surrogate pregnancy agreements, which are currently insecure, and negative public perception (Catsanos et.al., 2012).

sSurrogacy; raises questions about the definition of parenting, the autonomy of the surrogate mother, the potential risks to the embryo (alcohol intake, smoking, drugs) and the risks of the surrogate mother (pregnancy-related thromboembolism, hypertension, diabetes, preeclampsia), as well as the psychological effects on the surrogate mother and the prospective child (Díaz-García et.al., 2010).

CONCLUSION

Uterus transplantation has been a beacon of hope for many patients with uterine factor-related infertility. It is certain that it will lead to significant changes in the lives of couples who have been expecting a child for a long time and cannot have children despite treatment. However, during uterine transplants, it also rotates and all risks for the recipient should be carefully considered. Both parties should be

informed in detail about this. In case of pregnancy, the risks that the fetus and herself will be exposed to and the harm to the donor should be clearly demonstrated. It is seen that more studies are needed especially for the complications that may occur in the mother and baby during pregnancy. In case the transplants are performed using a living donor, the donor should not be adversely affected by this situation.

Acknowledgments:

There are no thank you notes available.

Conflict of Interest:

There is no conflict of interest.

Ethical Approval (Must be answered):

There is no ethical violation.

Funding:

No financial support is available.

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