

Fertility preservation strategy in uterus transplantation

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To the editor,

Infertility affects millions of people – and has an impact on their families and communities. Estimates suggest that approximately one in every six people of reproductive age worldwide experience infertility in their lifetime. Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome is a congenital anomaly characterized by agenesis/aplasia of the uterus and upper part of the vagina in females with normal external genitalia and a normal female karyotype. Infertility can also terminate in the 55% of causes by male factor usually due cryptic sperm defects (1). Uterus transplantation (UTx) involves removing a uterus from a donor and transferring it to someone who has absolute uterine factor infertility (AUI). This procedure It can take several months or years of planning before the uterus transplant surgery happens. This evaluation makes sure patients physically, mentally and emotionally fit to go through every aspect of the transplantation. Scollo et al. described a case report demonstrating how the oocytes cryopreservation can overcome the ethical issue related to embryo retrieval before a successful of UTx (2,3). Fertility preservation strategies especially in this denatality ERA are necessary to improve and give garancy to the population that have a family planning but do not have the possibility usually due economic reasons to perform it. In this scenario oocyte cryopreservation by vitrification trough an antagonist ovarian stimulation protocol is mandatory to collect more oocyte as possible (4,5). Another reason to preserve fertility is due oncological reasons where artificial

intelligence application can be useful to develop clinical decision surely in an ethically way. Young women in reproductive age that have diagnosis of malignancies as endometrial, breast or other types of cancers have the possibility to preserve their fertility in reproductive age. It's can usually happen to find patients with polycystic ovarian syndrome (PCOS) that is needed to treat with nutraceutical supplementation by inositols, alpha lipoic acid and vitamin D as well especially in their infertile pathway (6). UTx is an innovative procedure that surely offers a remarkable opportunity expanding the pool of reproductive options. UTx has profoundly changed the treatment landscape of AUI. There are numerous unique considerations in the application of reproductive technology for UTx recipients. As the treatment continues to evolve it is critical that experiences in trials are efficiently published to build a comprehensive, dynamic, and accessible shared body of knowledge about best practices and outcomes.

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