ADVANCEMENTS MADE IN REPRODUCTIVE MEDICINE FOR HUMAN UTERINE TRANSPLANTS

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Objective: For many years, organ transplantation has been a medical and surgical challenge. Since the first kidney transplant in the early 1960’s, many scientists have been inspired to attempt transplantations of other vital organs such as the liver, heart, lung and pancreas. In 1980, the prognosis for transplanted organs became more favorable with the development of cyclosporine therapy. Safer and more easily tolerated immunosuppressive therapy has opened the doors for the transplant of non-vital organs such as the uterus. Methods: The estimated incidence of uterine anomalies is 2 to 4 % in the general population. Patients with Mullerian agenesis or those who had their uterus removed for an obstetric or gynecologic indication may be considered potential candidates for future human uterine transplants. Previous animal studies have explored the feasibility of uterine transplantations as well as the impact of immunosuppressive therapy on fertility. In order for uterine transplants to be successful, surgical technique and teamwork are essential. Results: In 2000, a human uterine transplant was performed in Saudi Arabia however its mere attempt raised many moral and ethical concerns. Results from previous animal studies have documented viable pregnancies after a successful uterine transplant. At this point, further investigation is required in order to investigate the possible unknown risks for human uterine transplants. Conclusion: By exploring the different alternatives for fertility such as in vitro fertilization, gamete intrafallopian tube transfer, adoption and surrogacy, the uterine transplant may be considered another alternative for infertility.