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| **PROTOCOL TITLE:** Kidney and Pancreas Post-transplant: Contraception | |
| **APPLICABLE FACILITIES:**  EHC EDH EHH EHI EHN EJCH ELTAC ESJH  EUH EUHM EUHS EUOSH EWWH RJV-ERH RJV-ESOP TEC/ESA | |
| **EFFECTIVE DATE:** | **ORIGINATION DATE:** 08/24/2020 |

**CATEGORY:** Diagnostic/Therapeutic/Preventive, Medication Guidelines, Teaching

**LEVEL:** Independent

**PURPOSE:** This protocol provides guidelines on contraception use for female patients post-kidney and pancreas transplant.

**CONTRACEPTION CONSIDERATIONS IN TRANSPLANT**

Solid organ transplant recipients are at increased risk for adverse health events as a result of pregnancy according to the CDC due to the use of teratogenic drugs, including:

1. Mycophenolate mofetil
2. Angiotensin-converting enzyme inhibitors (ACEIs)
3. Angiotensin II receptor blockers (ARBs)
4. HMG-CoA reductase inhibitors (statins)

Long-acting, highly effective contraceptive methods are preferred to avoid unintended pregnancy while on these teratogenic agents. Intrauterine devices (IUD) and implants are preferred long-term with the advantage of not requiring patient intervention.

**TARGET PATIENT POPULATIONS**

Women of child-bearing age taking teratogenic medications post-kidney/pancreas transplant.

**CLASSIFICATIONS OF HORMONAL CONTRACEPTIVE METHODS**

1 = No restriction

2 = Advantages outweigh theoretical risks

3 = Theoretical risks outweigh advantages

4 = Unacceptable risk

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|  | **IUD** | **Implants** | **DMPA** | **POP** | **CHC** |
| **Uncomplicated Patients** | Initiation – 3  Continuation – 2 | 2 | 2 | 2 | 2 |
| **Complicated Patients** (graft failure, rejection) | Initiation – 2  Continuation – 2 | 2 | 2 | 2 | 4 |

IUD = intrauterine device; DMPA = depot medroxyprogesterone acetate; POP = progestin-only pill; CHC = combined hormonal contraceptive

**COAGULATION CONSIDERATIONS**

Estrogen containing contraceptives decrease coagulation inhibition by increasing plasma fibrinogen and the activity of coagulation factors. Combined hormonal contraceptives (CHCs) should be held at time of transplant and consider resuming 3 months post-operatively for kidney/transplant recipients. For recipients, consider consulting your gynecology provider for initiation of contraception.

**MYCOPHENOLATE – ACCEPTABLE CONTRACEPTIVE METHODS**

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| **Option 1**  **Methods to Use Alone** | -Intrauterine devices (IUDs)  -Tubal sterilization  -Patient’s partner had a vasectomy | | |
| **Option 2**  **Choose one hormonal method AND one barrier method** | **Hormone Methods** (choose one)  **-Estrogen and Progesterone**  -Oral contraceptive pill  -Transdermal patch  -Vaginal ring  **-Progesterone-only**  -Injection  -Implant | **AND** | **Barrier Methods** (choose one)  -Diaphragm with spermicide  -Cervical cap with spermicide  -Contraceptive sponge  -Male condom  -Female condom |
| **Option 3**  **Choose one barrier method from each column** | **Barrier Methods** (choose one)  -Diaphragm with spermicide  -Cervical cap with spermicide  -Contraceptive sponge | **AND** | **Barrier Methods** (choose one)  -Male condom  -Female condom |

**RELATED POLICIES / PROCEDURES:** N/A

**DEFINITIONS:** N/A

**REFERENCES AND SOURCES OF EVIDENCE:**

Bonnar J. Coagulation effects of oral contraception. Am J Obstet Gynecol. 1987; 157:1042-8.\

Gomez-Lobo V. Optimal contraception for the female transplant recipient. AST. 2011.

U.S. Medical Eligibility Criteria for Contraceptive Use. 2016; 65:3.

Mycophenolate-related risk of miscarriage and birth defects. 2020. Mycophenolaterems.com.

**KEY WORDS:** Kidney transplant, contraception