**Pretransplant Screening and Management of HCV Infection**

**Recommendations**

- All transplant centers should be able to test for HCV infection by at least 6 months after completion of prior IFN therapy (G.4.2.2).

**Evaluation before Transplantation**

- All transplant candidates should undergo a liver biopsy before transplantation (weak evidence G.4.1.1).

- It is suggested that HCV-infected transplant candidates undergo a liver biopsy before treatment with IFN (moderate evidence 4.1.2).

**Follow-up after Transplantation**

- If NAT becomes positive, put the patient on hold status and fully evaluate their liver disease.

- If NAT remains negative for 12 months, it may be discontinued if an accurate history of nonadherence to IFN can be validated (moderate evidence G.4.1.1).

**Management of HCV Infection in Transplant Candidates**

- Transplantation of HCV-infected kidneys should be restricted to recipients with positive EIA and NAT (weak evidence G.4.2.2).

**Identification of HCV-infected Patients**

- It is suggested that patients on a waiting list for transplantation be evaluated for HCV infection before transplantation (weak evidence G.4.1.1).

**Algorithm 1: Pretransplant Screening and Management of HCV Infection**

**Algorithm 2: Management of Wait-listed Transplant Candidates**

**Historical Scoring System of Liver Fibrosis**

- Stage 0: P-C septae
- Stage 1: Portal areas with short fibrous septae
- Stage 2: Portal areas with short fibrous septae bridging (P-P or P-C)
- Stage 3: Portal areas with marked bridging (P-P or P-C)
- Stage 4: Portal areas with cirrhosis

**Algorithm 3: Use of Kidneys from HCV-infected Donors**

- All HCV-infected donors should be tested for HCV infection (weak evidence G.4.1.1).

**Abbreviations**

- IFN: interferon
- EIA: enzyme immunoassay
- NAT: nucleic acid test
- SVR: sustained virologic response
- HCV: hepatitis C virus
- CHB: chronic hepatitis B
- NODAT: new-onset diabetes after transplantation
- ARC: absolute reticulocyte count
- TSAT: serum transferrin saturation
- Hb: hemoglobin

**Use of Kidneys from HCV-infected Donors**

- All HCV-infected donors should be tested for HCV infection (weak evidence G.4.1.1).

**Living Kidney Donors**

- Living donors should be tested for HCV infection.

**Exclusion from Donating**

- HCV-infected persons from donating because of:
  - Presence of HCV in the serum
  - HCV reactivation
  - Superinfection

**Transmission risk**

- HCV-infected persons should not be kept on dialysis longer than necessary.

**Algorithm 4: Use of Kidneys from HCV-infected Donors**

- HCV-infected donor.

**Abnormalities**

- IFN: interferon
- EIA: enzyme immunoassay
- HCV: hepatitis C virus
- NAT: nucleic acid test
- SVR: sustained virologic response
- HCV: hepatitis C virus
- CHB: chronic hepatitis B
- NODAT: new-onset diabetes after transplantation
- ARC: absolute reticulocyte count
- TSAT: serum transferrin saturation
- Hb: hemoglobin
**Management of HCV-Related Complications in Kidney Transplant Recipients**

**BACKGROUND**

Hepatitis C virus (HCV) infection is a worldwide public health problem and a significant challenge for transplantation. HCV infection is transmitted by bloodborne routes, including exposure to infected blood during transfusion, nonmedical intravenous drug use, and perinatal transmission. Worldwide, the prevalence of HCV infection ranges from 7%–40% among deceased donors ranges from 1%–11%.

**OBJECTIVE**

The objective of this guideline is to provide recommendations for the prevention, diagnosis, evaluation, and treatment of HCV infection among deceased donors and living kidney transplant recipients. The guideline is intended to promote the best possible outcomes for recipients, donors, and the general public.

**METHODS**

The guideline was developed by the Kidney Disease: Improving Global Outcome (KDIGO) Clinical Practices Guideline Work Group. The Work Group included expert members from various disciplines, including infectious diseases, transplantation, and public health. The guideline was developed using a transparent, evidence-based approach, incorporating the best available evidence and expert consensus.

**OUTCOMES**

The guideline provides recommendations for the prevention, diagnosis, evaluation, and treatment of HCV infection among deceased donors and living kidney transplant recipients. The recommendations are intended to improve outcomes for recipients, donors, and the general public.

**FOCUS AREAS**

- Prevention of HCV infection in potential kidney transplant recipients
- Diagnosis and evaluation of HCV infection in kidney transplant recipients
- Treatment of HCV infection in kidney transplant recipients

**KEY RECOMMENDATIONS**

1. **Prevention of HCV infection in potential kidney transplant recipients**
   - screen all potential kidney transplant recipients for HCV infection
   - offer antiviral therapy to HCV-infected recipients who are not currently infected

2. **Diagnosis and evaluation of HCV infection in kidney transplant recipients**
   - measure serum HCV RNA levels and liver function tests
   - perform a liver biopsy to assess the extent of liver disease

3. **Treatment of HCV infection in kidney transplant recipients**
   - consider antiviral therapy for HCV-infected kidney transplant recipients
   - choose antiviral therapy based on the drug regimen
   - monitor for treatment response and adverse effects

**DISCUSSION**

The guideline includes recommendations for the prevention, diagnosis, evaluation, and treatment of HCV infection among deceased donors and living kidney transplant recipients. The recommendations are intended to improve outcomes for recipients, donors, and the general public.

**ACKNOWLEDGEMENTS**

The KDIGO Clinical Practice Guideline Work Group would like to acknowledge the contributions of all members of the Work Group. The guideline was developed through a transparent, evidence-based approach, incorporating the best available evidence and expert consensus.