SUMMARY & CONCLUSION

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Patients with chronic kidney disease (CKD) on renal replacement therapy especially hemodialysis (HD) continue to have a higher prevalence of hepatitis C virus (HCV) infection than the general population.

Dialysis patients generally have high morbidity and mortality rates reflecting age and comorbid conditions making the long-term consequences of HCV infection difficult to determine. The recommended therapy of most patients with chronic HCV infection who do not have renal dysfunction consists of interferon alfa (preferably pegylated interferon) in combination with ribavirin,Ribavirin warnings for patients with renal dysfunction are because its clearance is impaired in these individuals and the drug and its metabolites are not removed by hemodialysis.

IFN therapy in HD patients results in good biochemical and virological response and appears to exert a beneficial effect on the course of liver disease following renal transplantation, also documented that IFNa therapy for treatment of HCV infected ESRD patients on maintenance dialysis, administered prior to renal transplantation, is associated with high rates of sustained biochemical and virological response in the post-transplant period.

Although the presence of anti-HCV antibodies at the time of renal transplantation may be associated with an increased risk of death, Some studies suggest that renal transplantation may result in better survival than dialysis among anti-HCV positive patients.

HCV infection may be more commonly associated with glomerular disease in renal transplants than in native kidneys. One possible mechanism is that immunosuppressive therapy to prevent rejection increases the titer of HCV RNA.

Among renal transplant recipients with HCV infection, both recurrent glomerular disease and de novo MPGN and MN can occur**.**

Because post-transplant alpha-IFN therapy cannot be instituted due to the high rate of rejection associated with the immunologic properties of the treatment, and because ribavirin is not indicated during hemodialysis because of the possibility of severe hemolytic anemias related to cumulative doses of the drug, pretransplant alpha-IFN monotherapy represents the current approach to treating patients with chronic HCV hepatitis**.**

The efficacy of interferon alfa therapy in chronic hepatitis C has been shown in many randomized controlled trials,and its use currently is recommended in anti-HCV positive patients with abnormal serum aminotransferases and well compensated chronic hepatitis on biopsy.

Pretransplantation alpha-IFN monotherapy may be effective to produce disappearance of viral replication in HCV-infected patients who are candidates for kidney transplantation. HCV-RNA clearance can be maintained in the post-transplant period despite interactions with immunosuppressive agents.

The authors concluded that Patients who were treated with IFN had a significantly better liver function with less frequent modifications of their immunosuppressive regimens compared with non-treated patients. Furthermore, the frequencies of chronic graft dysfunction and proteinuria were significantly higher in non-treated patients. Thus treating HCV-positive HD patients with IFN therapy before transplantation is recommended.