

## Hepatitis C, Chronic Renal Failure, Control Is Possible!

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**H**epatitis C virus (HCV) infection has come to the top of virus-induced liver diseases in many parts of the world. In Iran, it seems that HCV prevalence in general population is less than one percent, which is much lower than in most of the regional countries<sup>(1)</sup>. However, the infection is emerging in Iran mostly due to problem of intravenous drug abuse and needle-sharing in the country<sup>(2, 3)</sup>. The patients receiving maintenance transfusion such as chronic renal failure (CRF) patients and the patients with thalassemia major are the other population who are at the high risk of HCV acquisition although compulsory blood screening has been able to remarkably decrease the HCV incidence in these patients<sup>(4)</sup>. The prevalence of HCV infection among CRF patients on hemodialysis in Tehran, the capital of Iran, was around 13 percent in 2002<sup>(5)</sup>. There is no valid data regarding HCV incidence rate among CRF patients in country. However, according to the most recent official report of Management of Special Diseases and Transplantation Center (MSDT), the prevalence of HCV infection among patients on hemodialysis in the whole country has decreased from 14.4% in 1999 to 4.5% in 2005. Various reasons might be responsible for this reduction such as blood screening; developing technology of alternative modalities instead of transfusion in Iran like producing domestic Erythropoietin which has been resulted in decreasing transfusion; early

transplantation; and training health staffs. On the other hand, the other reason such as mortality of HCV infected CRF patients should not be neglected. Although there is no data in this regard in Iran, a meta-analysis, demonstrated that HCV infected patients on dialysis have an increased risk of mortality compared to HCV negative cases<sup>(6)</sup>. Therefore, with the lack of data defining incidence rate in Iran, the reduction of HCV prevalence in the country should not overlook the necessity of designing a comprehensive strategy to control HCV infection in our CRF patients. Accordingly, the following three-step strategy is recommended:

- 1- Designing and implementing an online network to link the dialysis centers across the country. The main objective of this network will be distributing information to both patients and health staffs. In addition, monthly training courses and congresses will be held in various cities with more focus on the cities with higher HCV infection prevalence. This network will provide basic infrastructure to offer emergency care to the infected health staff as well. This will not only attract the health staffs but also will train them for self protection.
- 2- Within the next three months, all CRF patients should be screened for HCV seromarkers. In addition, dialysis centers will be persuaded to screen their patients for viral seromarkers every 3 to 6 months. Then, the positive patients will be

recommended to receive treatment according to a unique and widely approved protocol. This intervention will limit the bulk of HCV infected cases. Recommended protocol will be published in next issue of Hepatitis Monthly.

3- HCV positive CRF patients will be placed in the top of waiting list for kidney transplantation. In Iran where there is no waiting list, the facilities should be provided for HCV positive patients for early transplantation. The papers have been demonstrated the higher mortality in HCV positive patients on dialysis<sup>(6)</sup>. On the other hand, not only HCV positive status alone is not a contraindication for renal transplantation but also HCV infection does not seem to influence patient and graft survival within a medium time follow up in living allograft recipients<sup>(7)</sup>. Then, if the HCV positive patients are undergone renal transplantation, both the mortality risk will be decreased for patients and HCV prevalence in dialysis centers will be diminished.

This strategy has been introduced in this issue to be presented to the experts. The comments will be welcomed. We are willing to provide a forum to challenge in this regard.

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