LONG–TERM EFFECTS OF HCV ERADICATION

Filomena Morisco, Rocco Granata, Laura Donnarumma, Maria Guarino, Nicola Caporaso.

Gastroenterologia – Università di Napoli Federico II

In patients with chronic hepatitis C, therapy is considered effective when the sustained virological response (undetectable HCV-RNA in serum 6 months after the end of the therapy) was achieved. Although the persistence of HCV eradication in short- or medium-term period (3-5 years) is well-established, little is known about the long-term follow-up.

**Aim**
The aim of the study was to evaluate the long-term persistence of HCV eradication in patients with chronic hepatitis C who obtained sustained virological response (SVR). In particular, we wanted to assess the risk of long-term virological relapse and liver related-complications.

**Methods**
From January 1, 1989 to December 31, 2008, 186 consecutive subjects (M/F 120/66, median age 50.2 years, range 22-67) with chronic hepatitis C and SVR after interferon-based therapy, were enrolled in a long-term clinical follow-up study.

170 patients had pre-treatment diagnosis of chronic hepatitis (CHC) and 16 patients had cirrhosis. The genotype distribution was reflective of the South Italy HCV infected population. All patients received interferon-based therapy (75 with conventional IFN-alfa2a or alfa2b monotherapy, 29 with conventional IFN- alfa2a or alfa2b and ribavirin, and 82 with pegylated IFN-alfa2a or alfa2b and ribavirin). The patients were followed with clinical, biochemical, virological and ultrasonographic assessments every 6 months until the 3rd year of follow-up and than every 12 months. Presence or absence of HCV-RNA in serum was determined by quantitative RT-PCR.

**Results**
The median follow-up was 7.2 years (range: 0.5-19.8 years). Serum HCV RNA remained undetectable in all patients, indicating the absence of risk of HCV recurrence independently from the schedule of therapy utilized (total dose, duration of therapy and type of drug). During the observation period 3 liver-related complications (2 hepatocellular carcinoma, 1 bleeding from esophageal varices) were observed. All the 3 events occurred in patients with pre-treatment cirrhosis. Only 1 out of 186 patients deceased for liver-related causes (HCC) with a mortality rate of 0.074%/person/year.

**Conclusions**
In this large cohort of chronic hepatitis C patients with SVR, the virus eradication was durable up to 20 years after treatment. Overall patients with CHC and SVR show an excellent prognosis with no risk of viral recurrence and a very low rate of mortality, so they can be considered healed. Patients with pre-treatment evidence of cirrhosis show a rate of liver complications that cannot be neglected.