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LETTER TO EDITOR

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Chronic hepatitis C successfully treated with telaprevir, pegylated interferon and ribavirin in severe aplastic anemia

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Dear Editor,

Telaprevir combination with pegylated-interferon (Peg-IFN) +ribavirin significantly improves response rates in HCV infection.[1-3] However this triple regimen is particularly associated with increased rates of side effects.[4] HCV infection in patients undergoing hematopoietic stem cell transplantation (HSCT) increases the risks of liver-related complications and veno-occlusive disorder.[5,6] Cure of HCV before transplantation can eliminate these risks. We present a patient with severe aplastic anemia and chronic hepatitis C treated with telaprevir based triple regimen before HSCT.

A 24-year-old male had been diagnosed as severe aplastic anemia and chronic HCV infection. Initial tests revealed the followings: leukocytes 2500/mm^3, neutophils 570/mm^3, Hb 11.5 mg/mL, platelets 42,000/mm^3. HCV RNA level was 1,350,000 IU/mL and genotype 1b. Liver biopsy revealed moderate inflammation, mild fibrosis and iron deposition due to multiple transfusions. A detailed informed consent was obtained and he was given modified doses of Peg-IFN-α2a (135 mcg/week) + ribavirin (600 mg/day) and full dose telaprevir (2,250 mg/day).

His trombocytopenia has deepened (10,600/mm3) and peg-INF was reduced to 67.5 mcg/week after the first dose and was given with platelet transfusions. Hemoglobin level fell to 8.6 g/dL and required erythrocyte replacement as well as further dose reduction in ribavirin. A rash has appeared on his face and scalp in the fourth week and was evaluated as "telaprevir associated seborrheic dermatitis". Topical steorid creams were given. HCV-RNA was negative at the end of the fourth week. HCV RNA was still negative at the end of 12th week and telaprevir was stopped. Erythrocyte and platelet replacements were given regularly due to persistent cytopenias. The treatment was continued with Peg-IFN and ribavirin combination. Neutropenia was deepened (110/mm^3) on the 14th week and peg-IFN dose was skipped. By the 16th week, he developed interferon related parapsoriasis and systemic steroid was given for 8 weeks. The treatment was completed at the end of 24th week. HCV-RNA studies at the end of treatment, 1st month follow-up, 3rd month follow-up and 6th month follow-up were negative. The patient was accepted as sustained virologic responder. On the 3rd month after treatment he underwent HSCT. Engraftment was achieved on the 14th day of transplantation.

A telaprevir-containing triple regimen is a challenge for a patient with severe cytopenias. Ribavirin free all-oral regimens are available with high efficacy and low rates of side effects. They are recommended in updated HCV treatment guidelines.[7,8] However they are neither commonly available nor reimbursed in some countries. However some patients including those with severe fibrosis or severe extrahepatic manifestations merit currently available standard of care. However HSCT with HCV infection would potentially cause new complications. Though not smooth enough; it might deserve to be recognized as a success story at the dawn of new safer and stronger all-oral regimens.

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