19-21 GIUGNO ROMA
UNIVERSITA' CATTOLICA DEL SACRO CUORE CENTRO CONGRESSI EUROPA
RESEARCH and CARE: FROM BENCH, TO BEDSIDE, TO COMMUNITY
Promosso da SIMIT
16° CONGRESSO NAZIONALE ICAR Italian Conference on AIDS and Antiviral Research
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POSTER 4 YOU ICAR 2024

BULEVIRTIDE: TREATMENT IN PEOPLE LIVING WITH HIV/HBV/HDV COINFECTION

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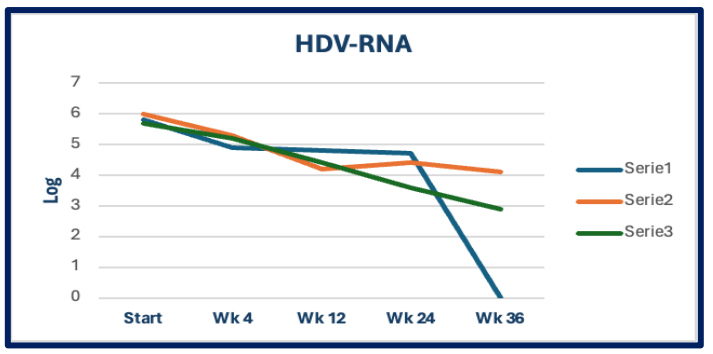
Introduction

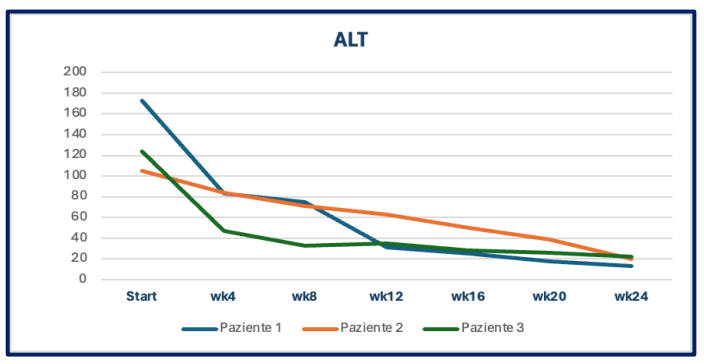
- Chronic hepatitis delta (HDV) remains the most severe and difficult-to-treat viral hepatitis, characterized by rapid progression into liver cirrhosis and dismal prognosis in most patients; people living with HIV (PLWH) are at higher risk of developing cirrhosis and its complication. A recent study on an Italian cohort of PLWH demonstrated a 19% prevalence of anti-HDV with HDV-RNA detected in 55.3% of these patients. Bulevirtide (BLV) is an entry inhibitor approved for the treatment HDV.

Study Design

- We analyzed retrospective data from 3 patients with HIV/HBV/HDV coinfection treated with BLV in Outpatients of Infectious Diseases Clinic of Pavia. Baseline characteristics are collected in Table 1. All patients were on antiretroviral therapy with a regimen effective also against HBV and had both HBV-DNA and HIV-RNA undetectable. BLV was administered at 2 mg per day up to 36 weeks. Treatment safety and tolerability, changes of liver functions parameters, virologic response, biochemical response, HIV-RNA and CD4 count were assessed during treatment.

Patient	Pt 1	Pt 2	Pt 3
Sex	F	M	M
Age	60 years	64 years	56 years
HIV	CDC A3 (1985)	CDC C3 (2007)	CDC B2 (1988)
ARV	BIC/TAF/FTC	BIC/TAF/FTC	BIC/TAF/FTC
RISK	EX-PWID	EX-PWID/MSM	EX-PWID
Comorbidities	Depressive syndrome	Previous gastric cancer,Osteopenia	SVR HCV (2016) Hypertension





Results

- In all patients ALT declines since wk 4 and were normalized at wk 24.
- HDV-RNA slowly decreased in all patients and at week 36 two patients achieved respectively, a 2 and 3 log reduction of HDV-RNA. HIV-RNA remained undetectable and no changes in CD4 counts were observed. No drug interaction with antiretroviral therapy were detected. 1 patient suffered from headache, which then resolved spontaneously, during the first month of therapy. No serious AEs were reported. All patients experienced a reduction in the fatigue they reported before starting treatment.

Conclusion

- According to this case series reported BLV appears to be safe, effective and well tolerated in PLWH. An early biochemical response and a slowly decline of HDV-RNA was observed in all patients at week 36. Further data and studies and longer follow-up are needed to clarify the impact of HDV treatment in coinfected patients.

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