Poster Presentations

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COMPARING THE LONG-TERM OUTCOME OF HEPATITIS DELTA AND HBV MONOINFECTION: IS HDV-INFECTION REALLY WORSE?

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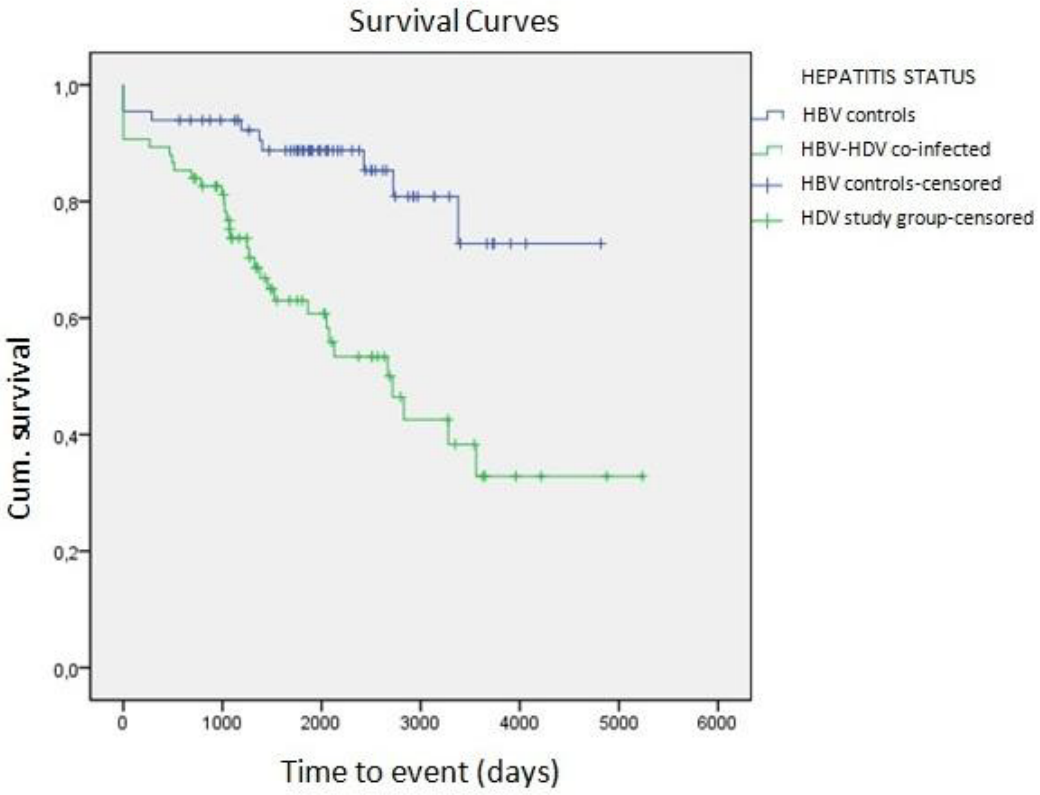
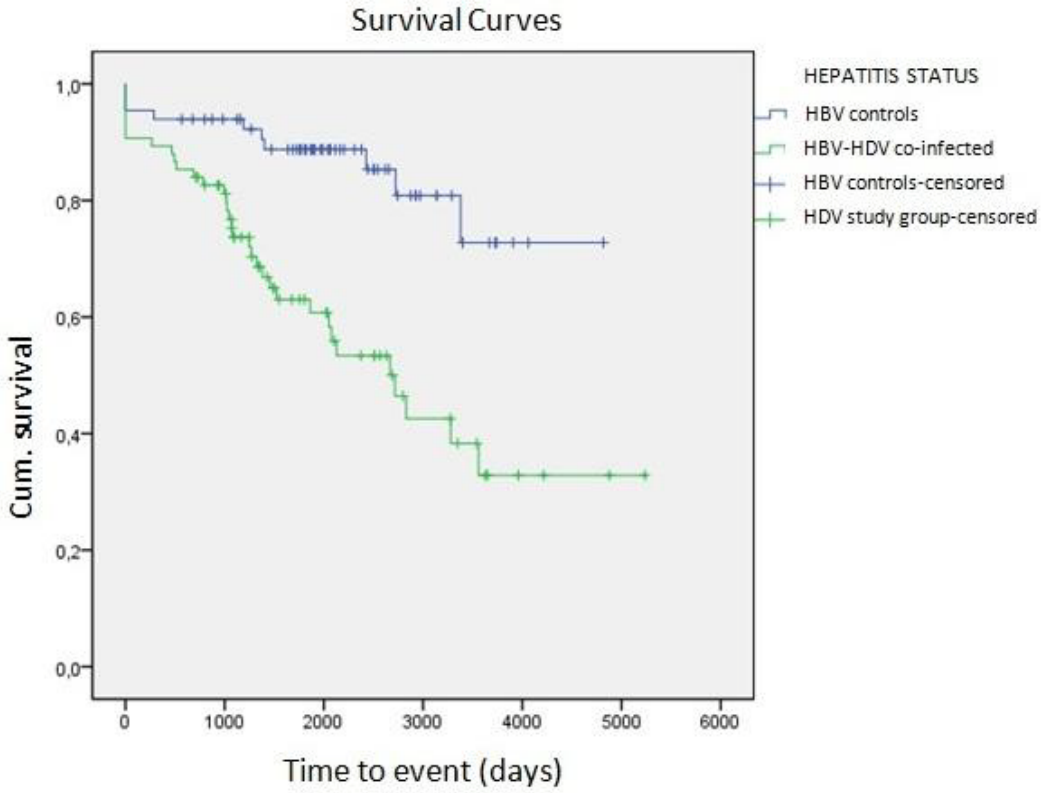
Hepatitis D virus infection was associated with a poor outcome in studies performed in the 1980s. Afterwards not all studies could show that individuals with hepatitis Delta develop more often clinical events than patients with hepatitis B alone. One reason might be that patients with a particularly severe course of disease died early, while long term progressers survived and were selectively included in later studies. The aim of this study was to assess the long-term outcome of hepatitis delta as compared to HBV monoinfection in Central Europe.
Patients and methods: We studied 141 HBsAg-positive patients with (N=75) or without (N=66) hepatitis Delta, who were followed for up to 15.7 years (median 5 years). HDV-positive and -negative patients were matched for age, gender, region of origin, HBeAg, antiHCV, and MELD score at baseline. The primary outcome was development of liver related complications, defined as liver decompensation (ascites, esophageal bleeding or hepatic encephalopathy), hepatocellular carcinoma, liver transplantation or liver-related death.
Results: Despite matching for the above mentioned criteria, patients with delta hepatitis had more often cirrhosis at baseline (50% vs. 14%), p< 0.0001.
Cox regression analysis revealed that anti-HDV-positive patients had a significantly higher risk to experience a clinical event during follow up (p=0.0002, see figure), to develop cirrhosis (p< 0.0001) and to undergo liver transplantation (p=0.048).
The higher risk to develop a liver-related complication remained significant even when excluding patients with liver cirrhosis at baseline (5% for HBV alone vs. 26% in HBV-HDV co-infected, p=0.004).
Variables at baseline associated with clinical endpoints in Delta hepatitis were: MELD>8 (p< 0.001), APRI>1.58 (p< 0.001), thrombocytes < 100000/ml (p< 0.0001) and HBe-negativity (p=0.022),
Of note, anti-HDV-positive and -negative patients did not differ in terms of HCC development and

HBe-seroconversion.



[Survival curve: event in HBV vs. HBV-HDV]

Conclusions: This study shows that
(i) Delta hepatitis is indeed associated with a poorer prognosis than hepatitis B alone,
(ii) that distinct clinical and virological parameters may predict the outcome of hepatitis D, and
(iii) that HDV infection did not increase the risk to develop HCC in a Central European cohort of Delta hepatitis patients.


Survival Curves
Cum. survival
1,0
0,8
0,6
0,4
0,2
0,0
0
1000
2000
3000
4000
5000
6000
Time to event (days)
HEPATITIS STATUS
HBV controls
HBV-HDV co-infected
HBV controls-censored
HDV study group-censored

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