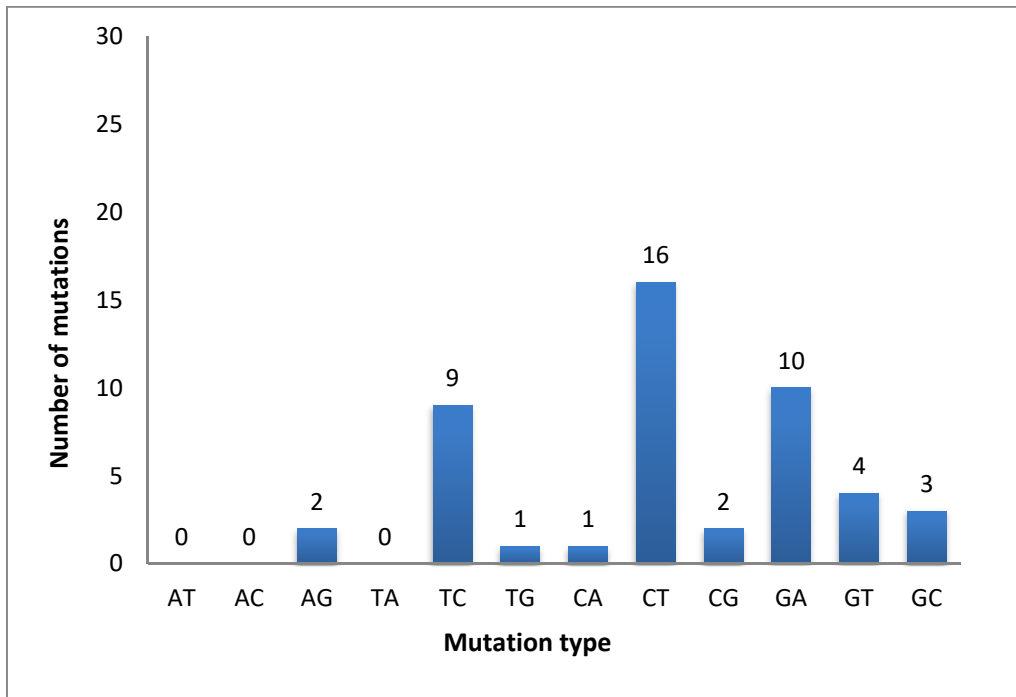


Supplementary Table S1. Protocols for delta antigen (HDAg) encoding HDV genome region amplification. The table shows the different steps for amplification of the region of HDV genome encoding the HDAg used for HDV genotyping, including the retro-transcription and the three nested-PCR. Primer's sequence and amplification region per each step is reported. M13 sequence tail is underlined. Fw: Forward; Rv: Reverse; MID: multiplex identifier.

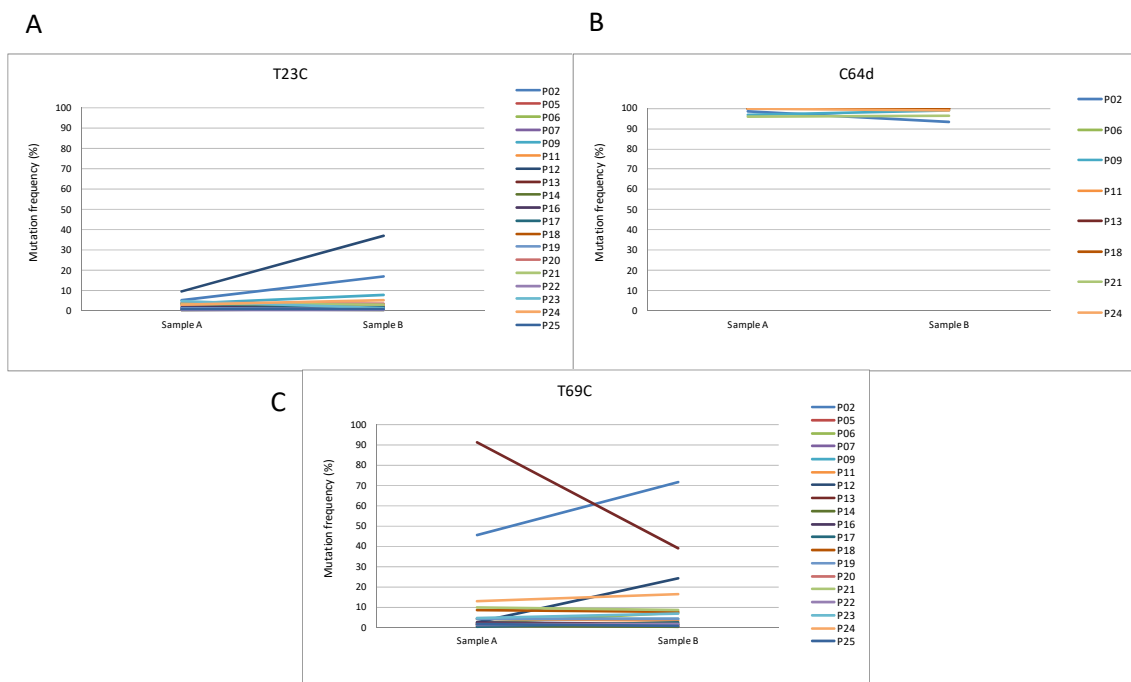
Amplification step	Primer	Amplified region	Primer sequence (5' → 3')	Protocol
RT	RT rv	728-747	CGGTCCCCTCGGAATGTTG	RT 42 °C 60 min; inactivation 70°C 10 min; cooling 20°C ∞
1st PCR	1a fw	865-884	AGGTCGGACCGCGAGGAGGT	95 °C 1 min; (94 °C 20 s. 54 °C 20 s. 72 °C 45s) × 40 cycles; 72 °C 3 min
	1a rv	306-328	GCTGAAGGGGTCCTCTGGAGGTG	
M13 PCR	M13 fw	886-909	<u>GTTGTAAAACGACGGCCAGT</u> GAGAT GCCATGCCGACCCGAAGAG	95 °C 2 min; (94 °C 20 s. 63 °C 20 s. 72 °C 30s) × 35 cycles; 72 °C 3 min
	M13 rv	1272- 1295	<u>CACAGGAAACAGCTATGACCCGACG</u> AAGGAAGGCCCTCGAGAAC	
MID PCR	MID fw	-	MID-GTTGTAAAACGACGGCCAGT	95 °C 2 min; (94 °C 20 s. 60 °C 20 s. 72 °C 45s) × 25 cycles; 72 °C 3 min
	MID rv	-	MID-CACAGGAAACAGCTATGACC	

Supplementary Table S2. Median complexity indexes calculated in samples A and B in the ribozyme region. The table shows the median and IQR of the following indexes: number of reads per sample; number of master sequence reads (Mstr); percentage of the master sequence (Mpct); number of haplotypes; number of polymorphic sites; Shannon index; Gini-Simpson coefficient; functional attribute diversity (FAD); mutation frequency (Mf); nucleotide diversity (Pi) and Pi to Mf ratio. P-values were obtained by applying a Kruskal Wallis-test.

Complexity index	Sample A Median (IQR)	Sample B Median (IQR)	p
N reads	3785 (1196.5 – 4981.5)	4909.5 (1550.5 – 6460)	.273
N reads of master (Mstr)	2462.5 (1109 – 3571.5)	3161.5 (1440 – 4601.5)	.389
% master (Mpct)	9.15 (85.17 – 94.33)	10.52 (83.9 – 94.4)	.872
N haplotypes	2.5 (6.5 – 9)	2.5 (6.5 – 9)	.737
Polymorphic sites	3 (5 – 8)	3 (5 – 8)	.907
N mutations	3 (5 – 8)	3 (5 – 8)	.895
Shannon index	0.32 (0.31 – 0.63)	0.41 (0.29 – 0.71)	.941
Gini Simpson coefficient	0.16 (0.1 – 0.26)	0.18 (0.1 – 0.28)	.872
Functional attribute diversity (FAD)	0.89 (0.7 -1.6)	0.77 (0.1 – 1.48)	.569
Mutation frequency (Mf)	0.001 (0.0006 – 0.0017)	0.0012 (0.0006 – 0.0018)	.872
Nucleotide diversity (Pi)	0.002 (0.0012 – 0.0033)	0.0023 (0.0012 – 0.0036)	.918
Pi to Mf ratio	0.10 (1.86 – 1.97)	0.11 (1.86 – 1.97)	.815



Supplementary Figure S1. Number and type of mutations found in the ribozyme region. The barplot shows the total number of each type of nucleotide change within the sequence.



Supplementary Figure S2. Evolution of mutation frequency between the two follow-up samples (A and B). Each patient is represented by a different color. The x-axis represents the two samples of each patient from the follow-up; the basal (Sample A) and the follow-up (Sample B) and the y-axis shows the relative frequency (%) in which the mutation pattern is present in each sample of each patient. T23C mutation; Panel A, C64 deletion; Panel B and T69C mutation; Panel C.