A Case of Autoimmune Hepatitis with extremely high level of alpha fetoprotein

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Background

Autoimmune hepatitis (AIH) is a form of chronic hepatitis of unknown etiology. Two types of childhood AIH are recognized according to seropositivity: smooth muscle antibody (SMA) and/or antinuclear antibody (ANA), which is AIH type 1; and antibodies to liver-kidney microsome type 1 (anti-LKM1), which is AIH type 2. Our goal is to introduce rare case of patient with autoimmune hepatitis which developed after enteroviral infection and had extremely high level of alpha fetoprotein (AFP).

Methods & Materials:

We used the medical chart of patient with autoimmune hepatitis admitted to “Nork” Infectious clinical hospital

Results:

The 5 years old boy admitted to hospital with fever, abdominal pain, weakness, jaundice, disorders of consciousness. A week before he had fever, diarrhea, vomiting. Laboratory data: CBC- RBC, WBC, PLT-normal,. Liver enzymes, bilirubin and IgG levels were elevated as well, as aFP and ANA.

Test	Result	N
Hb	102	120-140 g/l
ESR	64	4-10mm/h
ALT	2440	0-42 U/L
AST	1640	0-37 U/L
aFP	7685	>7.02ng/ml
total bilirubin	272.6	8.55-20.5mmol/l
direct bilirubin	180.4	0-5.1mmol/l
IgG	22,96	7,0- 16,0g/l
ANA	1: 320	1:<10
INR	3,29	0.82-1.18

INR 3,29 (N 0.82-1.18), CEA-negative, Anti-ds-DNA, LDH-normal, Copper total 828ug/l (N900-1900), LKM 1:<10 (N1:<10), SMA 1:<10 (N1:<10). Stool test for Enterovirus – positive.

Serology and/or PCR for HCV, HBV, HAV, HEV, EBV, CMV, Parvovirus B19, Brucellosis, Yersinosis, Pseudotuberculosis, Leishmaniasis, Leptospirosis – negative.

Liver biopsy showed autoimmune hepatitis (METAVIR Grade 2, stage 1).

Treatment:

Immediate therapy with high-dose prednisolone therapy was started, then we decreased prednisolone dose and added azathioprine. As a result, we had improvement of patients' condition, clinical findings and laboratory values.

Conclusion:

Autoimmune hepatitis followed by enteroviral infection. Extremely high level of alpha fetoprotein is not always marker of tumor.