Serum Lipids in Muroid Virus Nephropathy

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Colleagues,

There is no consensus concerning viral-infection-related changes in serum or plasma lipid values. Inoculation with sandfly fever virus was found to stimulate a series of changes in the plasma concentration of lipids and their transport lipoproteins [2]. Hemorrhagic fever with renal syndrome (HFRS) is often a self-limited nephropathy with proteinuria and several indigenous cases have been recently described in France [1]. We observed mild abnormalities of lipids during 4 cases of muroid virus nephropathy (table I). The clinical diagnosis was confirmed by serological evidence of specific fluorescent antibodies to Haantan virus (the etiologic agent of HFRS) and to Puumala virus (the etiologic agent of nephropathia epidemica) including IgM. Triglyceride values were increased whereas HDL cholesterol levels were low. Total cholesterol and apoprotein A and B were normal. At the time of elevation of triglycerides, acute renal failure and increase of SGPT without cholestasis were noted in the 3 last cases.

Lipid abnormalities disappeared 21 days after the onset of the disease in the 4th patient.

These changes in plasma lipid profiles appear to be multifactorial in muroid virus nephropathy. No depression of total cholesterol concentration in plasma developed in this Bunyaviridae infection like in experimental sandfly fever.

References

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Table I. Plasma lipid profiles in 4 patients with muroid virus nephropathy