16.00

LOW SERUM IGG LEVELS IN CHILDREN DURING THE ACUTE PHASE OF SEVERE BACTERIAL INFECTION

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In adults low serum albumin during bacterial infection correlates with poor outcome. In the literature there is no mention of IgG levels. Aim: To study IgG and albumin levels in children during the first 72 h of acute severe bacterial infections. Patient and Methods: Over 18 months - 1/2000-5/2001, children 1-14 y hospitalized with fever due to acute bacterial infections: lobar pneumonia, bacterial meningitis, pyelonephritis or lymphadenitis were evaluated in the first 72 h of hospitalization for serum albumin and IgG levels. Results: 48 children were studied: 19 children group I, were found to have albumin of ≤35 G/L (range 23-35 G/L). 29 children group II, had albumin ≥36 G/L (range 36-45). The mean IgG levels in group I was M=IgG 8.49 (range 4.5-11.2 G/L). The mean IgG level of group II was M=11.3 (range 5.9-18.4 G/L). Discussion: The direct correlation between low albumin and low IgG levels during the first days of a bacterial infection can be explained by a common pathophysiologic process acting to lower both levels. During bacterial infections IgG levels usually rise, the lower IgG levels could be explained by a losing process. Based on our observation that protein losing enteropathy is a frequent finding in acute severe bacterial infection we suggest that protein losing is the pathologic mechanism leading to lower albumin and IgG levels during the first days of acute bacterial infection.