

PROCALCITONIN, C-REACTIVE PROTEIN AND ERYTHROCYTE SEDIMENTATION RATE IN CHILDREN WITH ACTIVE AUTOIMMUNE DISEASES***B. Korczowski^{1,2}, J.R. Kowalczyk³, M. Bijak¹, J. Rusin¹**

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Procalcitonin (PCT), a 116 amino acid prohormon of calcitonin is a new acute phase reactant with features different to other markers of inflammatory response. The aim of the study was to compare serum PCT and C-reactive protein (CRP) levels and erythrocyte sedimentation rate (ESR) in active autoimmune diseases in children. PCT, CRP and ESR were determined in 45 children with active autoimmune process in course of various diseases: juvenile chronic arthritis (n=15) ulcerative colitis (n=11), autoimmune hemolytic anemia (n=4), Kawasaki disease (n=3), Leśniowski-Crohn disease (n=3), systemic lupus erythematoses (n=3), Behcet's syndrome (n=2), Takayasu arteritis (n=1), dermatomyositis (n=1), scleroderma (n=1), primary sclerosing cholangitis (n=1). Serum PCT levels were measured by immunoluminometric assay, CRP by turbidometric assay, ESR was counted in millimeters after one hour. PCT exceeded 0,5 ng/ml in 7 cases (range: 0,0 – 7,2 ng/ml; mean: $0,5 \pm 0,2$ ng/ml; median: 0,3 ng/ml); CRP was above 0,5 mg/dl in 37 children (range: 0,0 - 27,8 mg/dl; mean: $7,0 \pm 1,1$ mg/dl; median: 5,8 mg/dl); ESR was above 10 mm/h in all but 2 cases (range: 3 - 140 mm/h; mean: 59 ± 5 mm/h; median: 60 mm/h). Conclusion: contrary to CRP and ESR, serum PCT level in children with autoimmune diseases remains low. However in some children with highly active autoimmune process slight elevation of PCT concentration is observed without evidence of bacterial infection.

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