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## THE DIAGNOSTIC VALUE OF C-REACTIVE PROTEIN IN FEBRILE CHILDREN 2 TO 36 MONTHS OF AGE WITH CLINICALLY UNDETECTABLE SERIOUS BACTERIAL INFECTION

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C-reactive protein (CRP) rises in blood very quickly after an infection, even 1000 times over its normal value. Objective: To determine the diagnostic value of CRP in febrile children 2-36 months of age with clinically undetectable serious bacterial infection(SBI). Material-Methods: This study included 85 children 2-36 months of age with fever  $>38.0^{\circ}\text{C}$  with clinically undetectable SBI who were hospitalized in Pediatric Clinic from 1/3/02 to 1/3/03. We recorded every child's age, temperature and duration of fever and we clinically evaluated them. Total white blood count (WBC), absolute neutrophil count (ANC) and CRP were measured. Blood cultures, screening urinalysis and urine cultures were received and chest radiography was obtained when it was necessary. Bacteremia, meningitis, urine tract infection, pneumonia, septic arthritis and osteomyelitis were considered as SBI. Results: 37(44%) out of the 85 patients had SBI (25 had urine tract infection, 8 bacteremia, 3 pneumonia and 1 septic arthritis) and 48 (56%) didn't have SBI. The 2 groups had statistical significant differences in CRP, WBC and ANC (Table) For the table limits for WBC, ANC and CRP we also calculated sensitivity (SEN), specificity (SPE), positive prognostic value (PPV) and negative prognostic value (NPV) with the following results: WBC-SEN 67%, SPE 60%, PPV 57%, NPV 71%, ANC-SEN 49%, , SPE 77%, PPV 62%, NPV 66%, CRP-SEN 51%, SPE 75%, PPV 61%, NPV 79%. Conclusions: CRP is a valuable laboratory screening test for SBI and excels WBC and ANC in NPV.

	Patients without SBI (n=48)	Patients with SBI (n=37)	P
WBC $> 15000/\text{mm}^3$	19	25	$<0,05$
ANC $> 10000/\text{mm}^3$	11	18	$<0,05$
CRP $> 4\text{mg/dl}$	12	19	$<0,05$

