DEFECTIVE SERUM OPSONIZATION AND INFECTION

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To the Editor

I read with interest Dr. İ. Tezcan et al.'s nice study entitled "Defective Serum Opsonization Activity in Children Aged 6-48 Months Having Acute Purulent Otitis Media" in the recent issue of the Journal (1997; 39: 453-457).

The authors showed defective serum opsonization activity in 13.7 percent of 51 patients with acute purulent otitis media compared to 2.9 percent in 103 healthy children. The authors neither mention the frequency of other infections in patients with AOM nor have another control with other bacterial infections. Thus, it is not easy to accept whether opsonization defect was the cause or the result of AOM. It is also hard to determine whether 5 in 23 children (which corresponds to 21.8% rather than 218% as written in the summary of the paper) have had recurrent otitis media due to defective opsonization or as a result of recurrences of infection, which were found decreased. If the defective opsonization was the result of recurrence of infection, "opsonic defect could not be considered as a contributing factor for recurrence of AOM".

Since opsonization defect was also shown in 20 percent of the patients with recurrent lower respiratory tract infection by Genç et al.[1], I would rather consider that it was most likely the result of the disease.

On this occasion may I draw attention to the method part of the paper. It was written, "In controls, 50 µl yeast particles made up to the same reaction volume of only saline were similarly incubated". To my understanding it should read, "In controls, 50 µl yeast particles made up to the same volume by 10 µl control serum (mixture of sera obtained from healthy people of AB blood group)...", instead of "only saline".

REFERENCES

1. Genç H, Akcurin G, Savaş A, et al. Çocukluk çağı tekrarlayan alt solunum yolu enfeksiyonlarında maya hücresi opsonizasyonu. Çocuk Sağlığı ve Hastalıkları Dergisi 1997; 40: 505-511.

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REPLY

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To the Editor

Thanks to Dr. Özsoylu for his interest in our study entitled "Defective Serum Opsonization Activity in Children Aged 6-48 Months Having Acute Purulent Otitis Media" (Turk J Pediatr 1997; 39: 453-457).

This study consisted of the children presenting with the diagnosis of acute otitis media aged 6-48 months, when the antibody repertoire is relatively restricted. According to their medical histories, only two patients had recurrent urinary tract infections. The serum samples were obtained three weeks after the acute illness to exclude secondary opsonization defect. The results suggest that defective opsonization may play a role in susceptibility to recurrent otitis media. In baker's yeast opsonization assays, we use saline in the control tubes to count unphagocytosed yeast particles[1].

REFERENCES

1. Levinsky RJ, Harvey BA, Paleja S. A rapid objective method for measuring the yeast opsonisation activity of serum. J Immunol Methods 1978; 24: 251-256.

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