Circulating Immune Complexes in Thrombotic Thrombocytopenic Purpura (TTP)

To the Editor:

We read with interest the article on the use of plasmapheresis in TTP by Bukowski et al. We have also wondered, for similar reasons, if the trigger for the disseminated intravascular platelet aggregation noted in TTP could be the result of circulating immune complexes acting directly on platelets or indirectly via endothelial damage.

We thus sent a number of samples, taken during the acute phase, from two patients with typical TTP to Dr. Theofilopoulous and Dr. Dixon for the performance of their Raji cell radioimmunoassay for detecting immune complexes in human sera. The results from all specimens in both cases were negative. Since TTP could well be of heterogeneous etiology, this does not exclude an immune complex-mediated mechanism in all patients. Further testing should be undertaken in TTP patients using the various methods now available for circulating and fixed immune complexes.

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REFERENCES


Circulating Immune Complexes in Thrombotic Thrombocytopenic Purpura (TTP): Reply

To the Editor:

We read with interest the letter by Neame and Hirsh and would agree entirely with their comments concerning the possible role of immune complexes in TTP and the importance of detecting these in sera from this patient population. The possibility that this was not a pathogenic mechanism in their two patients seems likely, and further studies are needed to answer this question. Additionally, a recent report by Bayer et al. note the association of a TTP-like syndrome with infective endocarditis and elevated levels of circulating immune complexes, and Morrison and McMillan reported elevated levels of IgG adherent to platelets in a single patient with TTP, which they speculated to be part of an immune complex. These TTP-associated findings regressed in both instances when clinical recovery occurred. We again thank Neame and Hirsh for their comments and would agree wholeheartedly that in the future an important part of the evaluation of patients with a TTP-like syndrome should be the determination of immune complexes in their acute leukemia. N Engl J Med 292:828-832, 1975
Circulating immune complexes in thrombotic thrombocytopenic purpura (TTP) [letter]

PB Neame and J Hirsh