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IMMUNOFLUORESCENCE WITH STREPTOCOCCIC ANTIGENS IN CHRONIC RHEUMATIC MYOCARDITIS

Minerva Med.
(Medical Minerva)
Vol 56, 1965, pp 2349-2352
P.F. Angelino
G. Vacca

Comments and Conclusions

In an earlier study we found that the deposits of gamma-globulin marked on amputated auricles of patients commissurotomized by pure mitralic stenosis, if cemented with fluorescent antistreptolysin sera, reacted immunologically with the latter, thus revealing an antigenic nature of the streptolysinic type.

In this study we wanted to find out whether the same deposits of gamma-globulin, made to react with streptococacic antigens which had been rendered fluorescent, would reveal an interaction with the same, in this case evidencing also an antibody nature.

In 14 out of 26 patients studied we were able to find that this reaction did indeed occur. We can therefore say that, limited of course to the number of patients observed in this research study and in the preceding one, totaling 39 cases, whenever we wanted to bring out deposits of gamma-globulin by means of the immunofluorescent reaction, the latter reacted immunologically with the streptococacic antigens (O-streptolysin, streptochinase, streptohyaluronidase) or with streptococacic antibodies.

In this study we were furthermore able to find out that the immunofluorescent reactions were localized with absolute preference in the interstitial tissue and in the vasal walls with a lesser degree of constancy. In only 2 cases — by the way, with higher thoric titers of rheumatic antibodies — the immunofluorescent reaction extended also to the myofibers.
As regards the distribution of the reactivity of the tissues to the various marked antigens, we found that the majority of the positive cases (12 out of 14) reacted with all three streptococccic antigens used: the intensity of the reaction — although within the limits of an objective evaluation — appear to us in many cases to have revealed a regular distribution while in other cases this happened to the detriment of the streptochinasic or streptohyaluronidasic, as we can see in Table 3.

These findings appear to support the assumption — which we advanced earlier — as to a rheumatic pathology of the evolutive organ; in fact, the presence of accumulations of gamma-globulin, on the auricles of rheumatic subjects, although not in the acute phase of the disease, enabled us basically to suspect the presence of immunological elements; by the way, this was revealed to us in an earlier work of antigenc nature and in this study which is of an antibody nature; now, these immunological elements are immunologically capable of activating or justifying, with for instance, a silent pathological state, probably evolutive, perhaps capable of, in time, becoming the point of departure for a revival of the rheumatic activity or, outright, of phenomena of local autosensitization which might be followed by autoimmunological states.