ANF. (3) From 16 patients with RA, only one showed a C3 titre of 1:80. (4) Among the 56 native test sera from SLE and scleroderma patients, 52 had a titre of 1:10 or more and 4 were negative. (5) ANF-C3 binding cannot be shown with sera that have been inactivated at 56°C for 30 min. (6) No correlation could be found between ANF titre and ANF-C3 binding. (7) The demonstration of C3 binding in native test sera had the highest differential diagnostic value (see Figure). The method is simple and the reproducibility very good.

References


(A clinico-immunological study of serum and synovial fluid anti-
nuclear factors in rheumatoid arthritis and other arthritides.)

Müller-Eckhardt, K. and K., et al. (1968) Blut, 17, 227 (Untersuchung zur
Bedeutung des Fluoreszenz-Antiglobulintests und des Anti-
globulin-Konsumentests zum Nachweis antinuklearer
Sernlaktoren).

Svec, K. H., and Veit, B. C. (1967) Arthritis, Rheum., 6, 509 (Age-
related antinuclear factors immunologische characteristics and
associated clinical aspects)

aktoren bei der primär-chronischen polyarthritis

Zrtmann, D., and Cabeaua, C. R. (1968) Vertebr. Lek., 166, 166 (Triedy
antinukleanych immunoglobulinov a typy jadrovcu fluorecesnici)

A study of the incidence of articular chondrocalcinosis in Paget’s disease of bone. By I. Boussina, J. C. Gerster, J. Epiney, and G. H. Fallet (Department of Medicine, Divi-
sion of Rheumatology and Medical Out-Patients Clinic, University of Geneva)

Several authors have suggested a relationship between Paget’s disease and articular chondrocalcinosis (ACC), but in our opinion without sufficient proof. In order to
determine whether such an association does in fact exist, ACC was systematically sought in 66 patients suffering from Paget’s disease. Seventy-two subjects without Paget’s
disease, taken at random from a population of patients hospitalized for medical or surgical conditions, constituted the control group. They are of the same race and their age
and sex distributions are similar to those of the patients suffering from Paget’s disease.

Among the 66 pagetoid patients, average age (median)
76 years, 9 cases of ACC have been found. This represents
an incidence of 13-6% of the group. Of the 72 control
subjects, average age (median) 73 years, were found to
to have ACC. This represents an overall incidence of 9.7%
control group but the difference is not statistically

significant.

From this study we conclude that ACC does not occur
more frequently in Paget’s disease than in a group of control
subjects with the same age distribution.

Incidence of cathepsin D agglutinators in sera, synovial
fluids, and exudate cells and synovial tissue of patients with
RA and other rheumatic diseases. By K. Fehr, G. Artmann,
M. Veilwart, and A. Boni (Universitats-Rehumaklinik, Zurich)

Incidence and titre of cathepsin D agglutinators (e.g.
antibodies reacting specifically with human Fab2 produced
by cathepsin D) are significantly raised in sera of patients
with seropositive RA when compared with healthy blood
donors, seronegative RA, SLE, ankylosing spondylitis,
osteoarthritis, and trauma (P < 0.0005). Significantly
raised levels are also found in synovial fluids of sero-
positive RA patients when compared with seronegative
RA, other forms of arthritis, and osteoarthritis (P < 0.0005
to P < 0.01). In addition, cathepsin D agglutinators were
found in the tissue culture medium of incubated syn-
vectomy specimens from 7 out of 11 seropositive RA and
2 out of 7 seronegative RA, but not in 6 incubates of
patients with other rheumatic diseases. In the sera the
levels of these antibodies were positively correlated with
the levels of RF if the RF were determined by IgG anti-CD
Ripley coated erythrocytes, but not if the RF were deter-
determined by the Waaler-Rose or latex test.

By immunofluorescence studies using FITC-labeled Fab2, binding of Fab2 to synovial exudate inclusions
(phagolysosomes) occurred in 100% of seropositive RA and
about 80% of seronegative RA if the exudate cells showed evidence for phagocytosis of immune complexes.

Preliminary results with rheumatoid synovium of both
seropositive and seronegative RA patients suggest that
mononuclear cells suggestive of plasma cells can bind
labeled Fab2. These findings suggest (1) that there might
be a link between the production of cathepsin D agglutina-
tors and agglutinating RF in seropositive RA; (2) that
cathepsin D agglutinators may be produced in the syn-
vium of RA patients; and (3) that cathepsin D aggluti-
nators take part in the formation of immune complexes in
the rheumatoid synovial exudate.

Frequency of the atypical gene E1b of serum cholinesterase
among patients with ankylosing spondylitis. By A. Micheli
(Department of Medicine, Division of Rheumatology, Univer-
sity of Geneva, Switzerland)

A familiar incidence of ankylosing spondylitis (AS) has
been described on several occasions. In addition, it has
recently been pointed out that HL-A 27 antigen is found
with a high incidence in this disease.

The present study, initiated before this relationship
between HL-A 27 and AS was known, was prompted by the
discovery in twin sisters, homozygotes for the atypical
E1b gene of serum cholinesterase, of a bilateral sacroiliitis.
The question was tentatively raised of a relationship
between the E1b cholinesterase gene and AS. In a prelimi-
ary study on 10 patients with AS, three were found to
have the E1b gene, representing an incidence of 30% as
compared to 5% in a large control population.

Among 115 cases presently being investigated, 7-8%
have the E1b cholinesterase gene. A difference is thus
still apparent, although not statistically significant, if the
frequency of patients bearing the E1b gene is considered.
However, if the frequency of the gene E1b itself is con-
sidered, since another homozygote was found among AS
patients, it raises the percentage to 9-8 and the difference
compared with the control group is statistically significant
(P < 0.015).

In order to confirm this apparent relationship between
cholinesterase atypical gene and AS, further studies would
be necessary on other groups of patients, and the co-
icidence of this gene with some particular criteria or
features of this rheumatic disease should be looked for.
This aspect is presently under study.

Liver function tests and liver biopsies in patients with
rheumatoid arthritis. By R. Rau, K. Pfenninger, and
A. Boni (Rheumaklinik Stadtspalten Triemli and Universi-
tats Rheumaklinik, Zurich)

In patients with rheumatoid arthritis a total of 117 liver
biopsies and liver function tests were performed. Liver

I Boussina, J C Gerster, J Epiney and G H Fallet

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