Rudi Harold Cormane (1925-1987)

Theo van Joost, dermatoloog

Rudi Cormane (Bandoeng, 17 april 1925) kreeg poliomyelitis tijdens zijn artsenstudie in Leiden. Na revalidatie waarbij hij slechts gedeeltelijk herstelde, studeerde hij af en koos in Leiden voor de vervolgopleiding tot internist bij prof. Mulder. De belangstelling voor de dermatologie en voor de immunologische achtergronden was toen al gewekt. Prof. L.H. Jansen in Utrecht nodigde hem in 1960 uit voor een vervolgopleiding tot dermatoloog, waarop Cormane inging.

Al tijdens de Utrechtse tijd behoorde Cormane mondiaal tot de eersten die de immunofluorescentie-methodieken introduceerden in de dermatopathologie. De publicatie in de *Lancet* (1964) over lupus erythematodes verscheen reeds in deze periode. Dat artikel was de aanzet tot verder diepgaand onderzoek op immunodermatologisch gebied, waarbij ook bulleuze dermatosen werden betrokken.

Cormane werd in 1968, 100 jaar na de eerste hoogleraar dermatologie Chanfleury van IJsselstein, hoogleraar bij de Universiteit van Amsterdam (UvA). Hij legde beleidsmatig vooral het accent op die nieuwe subdiscipline, de immunodermatologie, waarvan hij internationaal een der grondleggers was. Deze lijn ontwikkelde zich tot centraal thema in zijn ambtsperiode en in de begripsvorming ontstond zo 'de Nieuwe Amsterdamse School'.

Ook voor buitenlandse onderzoekers was hij een inspirerende bron en de *European Society for Dermatological Research* werd mede door hem opgericht. Hij was eredoctor van de universiteit van Szeged in Hongarije. Cormane bleef bijna twintig jaar hoogleraar en hoofd van de afdeling Dermatologie en Venereologie bij de UvA, eerst in het Binnengasthuis en later - tot zijn overlijden op 18 februari 1987 - in het huidige AMC.

Beroepshalve werden vele reizen gemaakt, waarbij hij echter nimmer de nauwe banden vergat met het betoverende Oosten, zijn land van herkomst.

Van de directe leerlingen van Cormane werden een aantal hoogleraar: Th. van Joost, J.D. Bos, W.R. Faber en H.A.M. Neumann. In navolging van Cormane vestigden zij met andere dermatologen, waaronder J.B. van der Meer, een nieuwe traditie in de immunodermatologie en gaven daarmee in die tweede helft der 20ste eeuw de Nederlandse dermatologie nieuwe impulsen en een belangrijk internationaal aanzien.

from 10 to 40 years. The jaundice had begun not more than 10 days before the onset of the treatment. They were inhabitants of Naples and its surroundings during 1962.

The criteria adopted for evaluating the evolution of the disease were: (1) the serum-bilirubin level, (2) the serum glutamic-pyruvate transaminase (S.G.P.T.) level, (3) the serum glutamic-oxaloacetic transaminase (S.G.O.T) level, (4) the S.G.O.T./S.G.P.T. ratio, and (5) the fructose-diphosphate aldolase level. Determinations were made in each patient at the 3rd, 6th, 12th, 18th, and 24th day after the onset of the clinical experimentation. Only patients with the following biochemical manifestations were included in this study:

Serum-bilirubin	> 5 mg. per 100 ml.
S.G.P.T.	> 6 μmol. per ml. per 15 min.
S.G.O.T.	> 4 μmol. per ml. per 15 min.
S.G.O.T./S.G.P.T. ratio	< 0·80
Aldolase	> 40 Bruns units per ml.

The results were submitted to a double statistical analysis by the Student t and χ^2 tests of Pearson. Figs. 1–4 show the serum level of bilirubin and of the enzymic activities during the whole period of treatment. No statistically significant differences were observed in the biochemical data, and the disease was not shortened in the treated group of patients.

CONCLUSION

The conclusion is that, in the present group of patients, on the basis of the above criteria, prednisone therapy did not modify the course and the severity of viral hepatitis.

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"BOUND" GLOBULIN IN THE SKIN OF PATIENTS WITH CHRONIC DISCOID LUPUS ERYTHEMATOSUS AND SYSTEMIC LUPUS ERYTHEMATOSUS

IN what respect chronic discoid lupus erythematosus is related to systemic lupus erythematosus is still uncertain. In discoid lupus the lupus-erythematosus (L.E.) phenomenon is negative, and the history does not suggest vascular lesions or involvement of serous membranes. In both diseases the pathogenesis of the skin lesions is unknown, but they are probably the result of an autoimmune mechanism.

The starting-point of the present study was a hypothesis that, in the diseased skin, an (auto) antibody directed against an antigen is already present. To study this possibility the fluorescent antibody method was used.

Holborow et al. [1] and Friou [2] have shown that sera giving a positive L.E.-cell test contain a globulin factor with affinity to tissue nuclei. This phenomenon is attributed to an immune mechanism, with the L.E. factor as the (auto) antibody, directed against nucleoprotein as the antigen. Moreover, in systemic lupus erythematosus, Vazquez and Dixon [3] and others, using the fluorescent antiglobulin method, were able to demonstrate gamma-globulin at the sites of renal lesions and in the fibrotic lesions of spleen. More recently, Kaplan and Vaughan [4] demonstrated "bound" gamma-globulin in biopsy samples of rheumatoid synovial tissue.

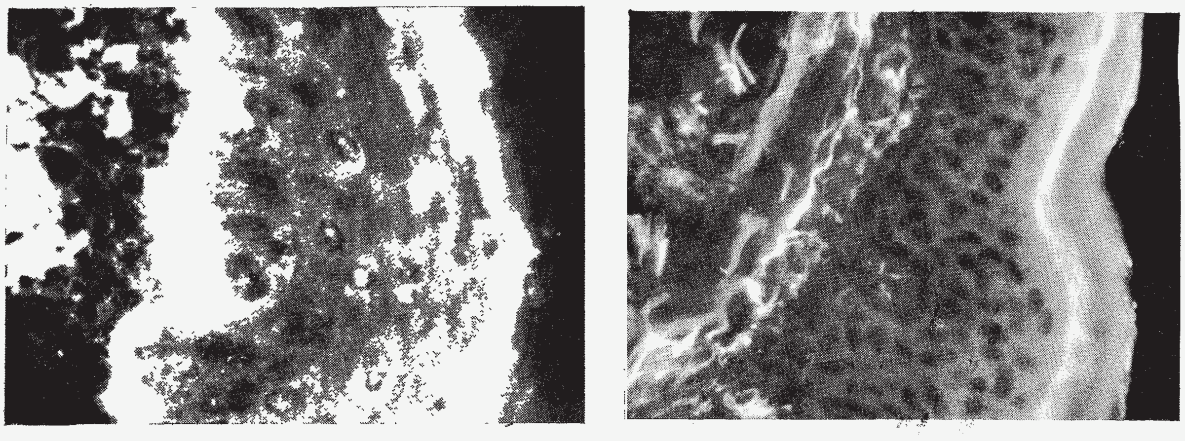
I thought it likely, therefore, that if sections of lupus erythematosus eruptions were exposed to fluorescein-conjugated anti-human-globulin serum, certain tissue structures would become fluorescent.

METHOD

Skin biopsy samples were obtained from the diseased and the normal skin of patients with discoid lupus erythematosus and systemic lupus erythematosus. The material was instantly frozen with CO_2 and transferred to a cryostat cabinet kept at −20°C in which sections were cut on a microtome at 8 μ thickness and mounted on slides. Each section was covered with a few drops of fluorescein-conjugated goat anti-human-globulin (Difco) serum. Duplicated sections were similarly treated with (a) unconjugated anti-human-globulin serum, (b) "L.E.-positive" serum, (c) serum from patients with discoid lupus erythematosus, and (d) normal serum.

After thirty minutes' incubation at room temperature, the sections were washed and mounted in FTA-mounting fluid (Difco). Mounted preparations were examined microscopically

1. Holborow, E. J., Weir, D. M., Johnson, G. D. *Brit. med. J.* 1957, ii, 732.
2. Friou, G. *J. clin. Invest.* 1957, **36**, 890.
3. Vazquez, J. J., Dixon, F. J. *Lab. Invest.* 1957, **6**, 205.
4. Kaplan, M. H., Vaughan, J. H. (Abstract). *Arthritis and Rheumatism*, 1959, **2**, 356.



(*a*) (*b*)

Discoid lupus erythematosus.

(*a*) "Diseased" skin. Note the positive staining of the region of the basal membrane. The speckled staining of the nuclei of the cells of the spinous layer and the fluorescence of the altered elastic fibres in the cutis are not considered specific.

(*b*) Normal skin. Note the absence of staining of the region of the basal membrane and the autofluorescence of the stratum granulosum and the elastic fibres.

using a mercury superpressure lamp: Osram HBO 200 W as the source of ultraviolet light; UG I (3 mm.) and UG II (2 mm.) as ultraviolet exciting filters; BG 23 (red) and GG 4 (UV) as barrier filters (Zeiss equipment).

RESULTS

In all sections of the diseased skin from 11 patients (discoid 8; systemic 3) examined after exposure to fluorescein-conjugated anti-human-globulin serum, fluorescence in the region of the basal membrane was conspicuous. The nuclei of the cells of the spinous layer sometimes showed speckled staining; but this could also be seen in the nuclei of spinous cells of normal skin. In the cutis elastic fibres showed autofluorescence.

In discoid lupus sections of duplicated biopsy samples from the "clinically" normal skin did not show any specific staining; but in systemic lupus they sometimes showed a faint staining which was thought to be specific. Sections from normal persons, when similarly treated, never showed fluorescence of these structures, but only autofluorescence of the elastic fibres and of the granular layer. In conditions which may be confused with lupus erythematosus eruptions (e.g., polymorphous light eruptions and seborrhoreic dermatitis) no fluorescence was observed.

When sections of diseased skin had previously been exposed to unconjugated antiglobulin serum, a reduced specific fluorescence was found, probably due to blocking of the specific sides. Further evidence of the specificity of the phenomenon was obtained by the following methods.

If sections of diseased skin were treated with unrelated fluorescein-conjugated rabbit antisera or with "normal" rabbit globulin serum, no specific staining was seen. On the other hand, with the sandwich technique, using rabbit anti-human globulin serum and fluorescein-conjugated goat anti-rabbit globulin serum, specific staining was obtained. Moreover, absorption of the anti-globulin conjugate with human gamma-globulin removes its ability to produce positive staining.

Pretreatment of sections from the normal skin with "L.E.-positive" serum resulted in positive staining of the nuclei, as already observed by Friou and Holborow, but the region of the basal membrane is not stained by this procedure.

DISCUSSION

In both discoid and systemic lupus erythematosus, the region of the basal membrane can be specifically stained with fluorescein-conjugated anti-human globulin serum.

A similar "bound" globulin factor (s) seems to be present in both diseases. Moreover, in systemic lupus erythematosus, it seems sometimes to be present—though to a much lesser extent—in the basal membrane of the "clinical" normal skin.

This "bound" globulin is not apparently related to the antinuclear factor or to the so-called L.E. factor.

This method may be of use in cases in which the clinical and histological diagnoses are questionable. Perhaps it also contributes to a better understanding of the skin lesions in both discoid and systemic lupus erythematosus. Fuller investigations are in progress.

Addendum.—Since this communication was submitted for publication an article on the subject has appeared in the *Journal of Investigative Dermatology* (December, 1963) by T. K. Burnham, T. R. Neblett, and G. Fine.

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A METHOD FOR ESTIMATING AORTIC ATHEROMATOSIS

RESEARCH in atherosclerosis is hampered by the inability to study the development of atheromatous plaques in vivo. Thus the effects of different therapy upon these plaques cannot be compared. For this reason we have developed a method of estimating the degree of aortic atheromatosis.

This technique is based on the difference in optical-reflection spectra between atheromatous plaques and the normal aortic wall, utilising two light-guides consisting of flexible bundles of small glass fibres conducting light from one end to the other without appreciable loss. Light is carried to the aortic wall through one light-guide, and the reflected light is transmitted back through the other light-guide to a measuring system.

The equipment consists of a light source, an optical-beam splitter, a rotating sector, a grey wedge, two monochromatic filters, a beam merger, the two light-guides (whose fibres are intermixed into one bundle), and a photomultiplier measuring

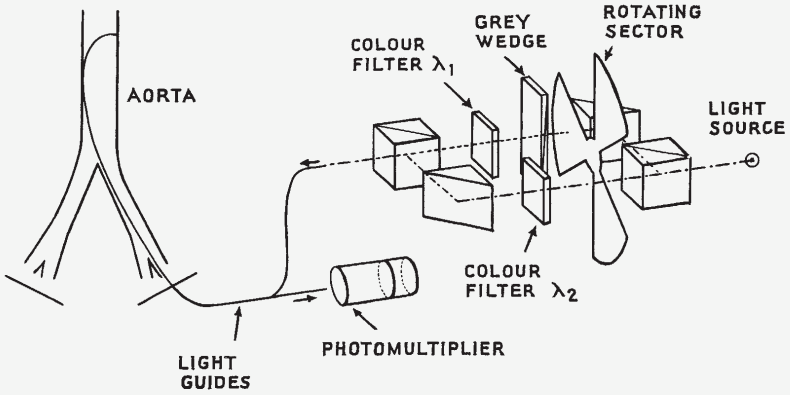

Fig. 1—Diagram of the apparatus and the light-guide in the aorta.

system (fig. 1). The light entering the guide consists of two alternating monochromatic beams. The intensity of the two beams is adjusted by the grey wedge so that the response of the photomultiplier is equal for the two wavelengths when the tip of the bundle is in contact with a normal aortic wall. When the tip is in contact with an atheromatous plaque, on the other hand, an unequal response is received because of the different reflection spectra.

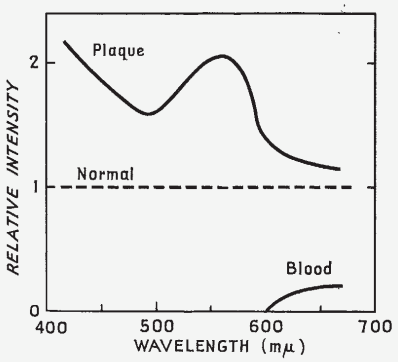

Fig. 2—Reflection spectrum from atheromatous plaques and from blood. The reflected intensity from a normal aortic wall has been taken as unity for each wavelength.

The choice of wavelengths is critical. The spectrum from a plaque and that from blood are plotted in fig. 2, where the reflected intensity from a normal aortic wall is taken as unity for each wavelength. The largest difference between reflected intensities from normal and atheromatous areas is obtained at 550 mμ and 650 mμ. For in-vivo applications these wavelengths are inconvenient because of their different transmittance in blood. The easiest way to overcome this difficulty is to use wavelengths below 600 mμ, when a thin layer of blood