The presence of cyclical microbial processes indicated in the blood of patients with chronic diseases

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Abstract

The following microscopy techniques concerning untreated blood from patients with chronic diseases, using ordinary light field and interference contrast, show that there exists a diffuse "seed" of many flake-like structures dispersed among the blood corpuscles. Initially they seemed to be lifeless, but suddenly and rapidly showed the capacity to produce many small granules getting clearly mobile on the slide and seemed to be able to grow in size and even develop into other formations, for instance dumbbell-shaped forms. This work confirms the theory of pleomorphism in microbiological science.

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As the flakes are rare in the blood of subjectively healthy people, they are supposed to be involved in different chronic degenerative disease processes.

Introduction

This research paper shows photographs of untreated blood using lightfield with interference contrast microscopy techniques. The observations documented indicate that there are particular forms of microbial life in the blood of patients with chronic diseases. This paper therefore hypothesizes that there may be various kinds of microbial growths in the body, which have not yet been discovered as a factor causing degenerative diseases.

Experimental procedure

Subjects

A total of 1500 patients were examined, as described below:

Healthy individuals

323 subjectively healthy experimental subjects were examined. These patients who were aged between 20 and 30 had previously only suffered from common health problems such as colds and flu.

Patients

A cross-section of cases from Dr. Enby's clinical practice which had previously been diagnosed at various hospitals throughout Scandinavia were categorized under the following types of diagnoses:

- 1. Mentally retarded children
- 2. Hodgkin's disease
- 3. Different types of non-Hodgkin lymphoma
- 4. Different kinds of allergies affecting the skin or the bronchi for example asthma
- 5. Paralysis-producing diseases: for example ALS (amyotrophic lateral sclerosis), Multiple Sclerosis and progressive muscular dystrophy
- 6. Different kinds of cancer

Method

Microscope equipment

Leitz' laboratory microscope Dialux 20 equipment with a 100 watt halogen lamp. Modified UK-condenser for darkfield, lightfield and interference contrast. Binocular phototube FSA. All photographic documentation was done with Leitz' completely automatic microscope camera, Vario-Orthomat. All the photographs were taken with interference contrast at 1200 times magnification except where indicated at 100 times magnification.

Materials and specimens for microscopy

Blood was taken from the fingertip or from near the disease focus (for example tumours) of the experimental subjects. A drop of blood was pressed out by capillary action to a thin layer between the cover slide and the object slide. In order to prevent drying, the edges of the cover slide were covered with immersion oil. The microscopic searching for the different types of flakes was carried out immediately. Where flakes were found, they were observed at regular intervals under the microscope, often up to one week after the specimens were taken. All the work was carried out at room temperature.

Results

Finding flake-like structures was rare in blood from the subjectively healthy individuals and patients with acute minor illnesses. On the other hand, flakes were frequently found in the blood from the disease groups of patients mentioned above. Four types of flakes have been observed in the blood:

Photograph 1a

Type 1 flake A. 4, 5 or 6-sided grey coloured flakes up to about 60μ in diameter. Along the edges and on the surfaces of these flakes there are often small round white glittering structures, the size of which can vary between 0.5μ and approximatly 3μ . Towards the upper right hand border of the flake is a ball-shaped white glittering structure about 3μ in diameter. It is often possible to see several flakes in one visual field (*Photograph 1b* and *1c*). Sometimes they exist together with a number of accumulations of granules lying freely in the surrounding plasma, as seen in picture 1d. Diagnosis: Ovarian cancer.

Photograph 1b

Lightfield and magnified 100 x. This blood sample was taken near the tumour and shows numerous Type 1 flakes A dispersed among the blood corpuscles. Diagnosis: Breast cancer.

Photograph 1c

Part enlargement of the flakes from *photograph 1b*. The flakes have 4 to 6 sides. Some of the flakes have small ball-shaped particles attached to their surface. Diagnosis: Breast cancer.

Photograph 1d

Three Type 1 A flakes in the same visual field with small heaps of minute granules. These granules can also be observed separately throughout the plasma (*Photograph 13*). Diagnosis: Ovarian cancer in final stage.



Photograph 1 a Type 1 flake A.



Photograph 1c



Photograph 1b



Photograph 1d

Photograph 2

Lightfield and 100 x enlargement. Type 1 flake B. These flake-like forms can reach a size of 1/10 mm in diameter. Like a 4 to 6 sided mosaic they are made up of large flake-like structures. These are similar to Type 1 Flake A. This mosaic structure, or flake complex is able to produce numerous small granules. The whole flake complex can be surrounded by large numbers of these. Following the flake is a long trail of granules from its lower border which can be observed as a slightly lighter area as marked to the left of the centre of the photograph. (*See arrows*). Diagnosis: Ovarian cancer.

Photograph 3

Lightfield and 100 x. Type 1 flake B. This flake shows again the trail of granules spreading from its lower border out through the blood as indicated down the centre of the photograph. Around the flake please note there is a 3 mm wide zone which continues into a trail. Both seem to have a granular structure. Note a decrease in red blood cells in comparison to *photograph 2*, indicating the presence of anaemia. (*See arrows*). Diagnosis: Ovarian cancer in final stage.

Photograph 4

Type 1 flake B. The same type of flake as in *photographs 2 and 3*. Different parts of the flake complex have a similar form to Type 1 flake A. In the periphery around the flake complex in this



Photograph 2 Lightfield and 100 \times enlargement



Photograph 4



Photograph 3 Lightfield and 100 x enlargement.



Photograph 5

photograph it becomes clear that the 3 mm wide zone seen in *photograph 3* consists of numerous granules which also appear on its upper surface. Diagnosis: Ovarian cancer.

Photograph 5

Note the increased magnification of the trail formation of Type l flake B in *photograph 3*. This trail formation consists of numerous granules of the same appearance as in *photographs 1d* and 4. Diagnosis: Ovarian cancer.

Figure I

Diagram to show the areas of the flake which are magnified from *photograph 6* for *photographs 7* and *8*.

Photograph 6

Lightfield and magnified 100 times. Type 2 flake. These flakes reach a size of 0.5 mm in diameter (such as this one). They have a 4-6 sided grey mosaic structure which is less obvious than in the Type 1 flake B. The mosaic-like structure is best seen in the uppermost part of the flake with a more diffuse structure in the lower part of it. The interior and the periphery of the flake produces many small granules as seen in picture 8. Diagnosis: Hodgkin's Disease.

Photograph 7

The upper half of the Type 2 flake in photograph 6 showing an obvious mosaic structure. Diagnosis: Hodgkin's Disease.

Photograph 8

Peripheral part of the Type 2 flake in photograph 6, showing an obvious production of granules around the periphery of the flake as well as in the interior region. The granules tend to be of a larger size the further away they are from the flake complex. Diagnosis: Hodgkin's Disease.



Figure 1



Photograph 7



Photograph 6



Photograph 8

Photograph 9

Type 3 flake. These flakes don't show an obvious mosaic structure. They reach a size of about 0.2 mm in diameter, are grey and have around their periphery garland-like formations. The surface of the flake has a high density of small recesses about 10μ in diameter and in each of these there is a convex lens-shaped particle $3-5\mu$ in diameter. The flake produces small granules in large quantities. In the upper right-hand part of the flake, the production of small granules can be observed. Diagnosis: Found in a mentally retarded child and in cases of Hodgkin's Disease.

Photograph 10

Type 3 Flake. The upper right part of the type 3 flake from photograph 9 four days after the specimen was taken. An abundance of granules have been produced around the whole flake and their size increases the further away they are from the edge of the flake, at the same time displacing the blood corpuscles around it. Diagnosis: Found in a mentally retarded child and in cases of Hodgkin's Disease.

Photograph 11

Type 4 Flake. These flakes are grey, often irregularly shaped, and do not have a mosaic structure. The Type 4 Flake is approximately 0.15 mm in diameter, and at its periphery are a number of light-reflecting ball-shaped particles up to 5μ in diameter. Granular production has not been noted. The air bubbles to the left and right sides of this photograph are artefacts. Diagnosis: Subjectively healthy individual.

Photograph 12

Type 1 flake A. The flake has, within 5 days, produced countless small granules, which are spread out between the object slide and cover slip. The further away these granules are from the flake itself, the larger they become. It can also be noted that the granules gradually develop into longer forms with increasing mobility as they migrate out amongst the red corpuscles. Diagnosis: Multiple sclerosis.



Photograph 9



Photograph 11



Photograph 10



Photograph 12

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Photograph 13

In the plasma film between, in or on blood corpuscles there are small, mobile granules. Diagnosis: Ovarian cancer.

Limitations of research methodology



Photograph 13

In working with living matter it is important to consider any environmental or other factors which may influence the accuracy of the research findings. In this case it may be worth noting that the light from the microscope may affect for example the granule production of the flakes. It has been presumed that the sudden and intensive production of granules by these flakes on the slide also takes place inside the body. Especially since granule-collections are found so frequently in the plasma of untreated blood from degeneratively ill individuals.

A possible distortion in the observation of the flakes may be caused by the pressure of the coverslip, flattening the so-called flake which would otherwise be found in its entirety in the blood. Under natural circumstances it is likely that the flake would be a 3-dimensional prism. This flattening of the flake may also explain the granulated effect on the upper surface of the flake, which would be due to the compressed granules, which would normally appear around the peripheral zone of the flake. In view of this possible distortion the term 'flake' would not be the most accurate term. In a living context the so-called flakes may better be described as an octahedron or dodecahedron.¹

The flakes with their accompanying trails of granules in the *photographs 2* and *3* seem to be in motion. This is, however, not the case as the trail effect occurs when the coverslip is placed on top of the flake causing the granules to spread out in this way.

Summary of observations

From the photographs presented in this paper a number of observations were made. Mainly the flake-like structures were found in untreated blood which initially appeared to be lifeless but showed the capacity to suddenly and rapidly produce many small granules. These granules are able to develop and grow into elongated mobile forms. During the flakes' granular producing phase, the size of the granules increases the further away they are found from the flake.

On the slide the granules in the periphery of these heaps developed the ability to move within 5-6 days and gradually migrate out among the surrounding blood corpuscles. The granules become clearly mobile on the slide. They are not merely oscillating and therefore this movement cannot only be attributed to Brownian motion. On the seventh day they begin to develop into longer dumbbell-shaped forms (*Photograph 12* and *figure II*). It has not been possible to follow the development of these granules beyond the 7th day due to the denaturing of the blood on the slide. The size of the granules varies from a fraction of 1 to 3 μ in diameter. Granules of a still larger diameter were observed more rarely. The occurrence in the plasma of very small granules of varying sizes has also been described. These are mobile, and similar granules are sometimes seen in the red, and always in the white blood corpuscles.

Discussion

From these microbial morphological findings in the blood there are several points which may be discussed. In this discussion, we will firstly look at the comparative results between the subjectively healthy and chronically ill patients to ascertain whether the observed microbial forms may indeed be pathogenic. We will then see how these findings may offer an understanding of the disease process in general.

As the observed flakes were essentially found in the blood of the individuals with diseases from the categories mentioned earlier (*see Patients page 4*) and very rarely in the blood of subjectively healthy people it is suggested that the flakes might be disease-creating.

These microscopic observations support earlier findings published in two previous papers^{2 3}. This earlier research was also based on blood samples from patients with different kinds of malignant processes and difficult allergies, neurological, skin, and muscle diseases, and described roe-like formations which were like heaps of numerous small granules found in the plasma, as with those from the flakes. With the additional unique finding of the flakes presented in this paper an explanation may be offered as to how many of these mobile granules in the plasma may be formed and that they probably develop into other larger forms. These granules have also been observed by other researchers under the darkfield microscope where they appear like small shiny dots.



Figure II Summarized diagrammatic representation of the photographs 1 to 13

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Further evidence to support the hypothesis that the flakes may be pathogenic is firstly that they were found more easily in blood taken nearer to the diseased tissue, for example a cancerous tumour (*Photograph 1b* and *1c*). Secondly the flakes and granules described in this paper have also been found in untreated blood from corpses of people with degenerative diseases. This suggests that after death the breakdown of the body is due to the activity of a microbial vegetation in the body fluids which was formerly symbiotic and conducive to health⁴.

As the presence of microbial life in the blood is not generally described in allopathic medical literature, the finding of these flakes could be considered controversial. Blood, according to current opinion, is viewed as sterile. This difference of opinion can be understood in various ways. Firstly the difficulty of observing microbial life in vivo and secondly, the prevailing beliefs within allopathic medicine, which until now have stopped the observations made.

Despite much searching, no microbes have been found that can offer a convincing explanation for the manifestations of chronic degenerative and malignant diseases. The flakes documented here have probably not been recognized in allopathic medicine because they can be difficult to evaluate microscopically and even impossible to culture because they would most likely be dependent on the specific environmental conditions provided by the body. The anaerobic bacteria are another example of this problem. Their presence for example in insidious postoperative infections has been difficult to demonstrate. Only through the use of special techniques for obtaining specimens and special culture processes it has become possible to identify them⁵. The belief that microorganisms invade the human body, causing somatic disturbances has been totally accepted by the medical profession since the time of Pasteur and for many diseases the causative microbe has been described. This monomorphistic line of thinking has become predominant throughout microbiology, but the pleomorphistic one, which continues to exist, poses vital questions for much microbiological reasoning today.

The monomorphistic school maintains that the microorganisms exist in one form with constant properties and that they propagate solely by division. Pasteur agreed with this opinion, and ever since his time it is generally considered that microorganisms can be divided into various genera and species, and that the origin of each different infection can be traced back to its own specific microbe-species.

The pleomorphistic school, on the other hand, maintains that microorganisms can develop through many different stages forming a continuous developmental cycle. Each microbial species can cause different types of somatic disturbance according to their developmental stage in the cycle. One of the foremost advocates of pleomorphism, Prof. Dr. Günther Enderlein (1872



Figure III Diagram to illustrate the section of cyclical development hypothesized in this paper.

- 1968), examined untreated blood using a darkfield microscope. From this straightforward research technique he confirmed the existence of microorganisms in the blood that went through different developmental stages. Enderlein maintained that one species of microbe could produce different pictures of diseases according to the stages of development in which they are found. Enderlein presented his research work, inter alia, in his book "Bakterien – Cyclogenie" (1924)⁶. The results of Enderlein's research have up to now been largely disregarded by medical science.

The categorization of the flakes into four types has helped on a practical level to organize them. It is clear from this research that these so-called flake types are not actually different species. Rather, it is likely that they are displaying the pleomorphistic characteristic of having varying appearances according to their developmental stage or their environmental conditions.

It is not yet possible to formulate a theory of how the flakes themselves are formed. Probably all formations described in this paper represent different developmental stages of a cycle (*Figure III*) and the granules – created from the flakes – seem to represent the continuation of a further development of the flakes as the granules so clearly are formed by them and grow larger into other forms with different sizes in a continuous way (*Figure II*). Therefore the microbial growths observed in this paper might follow a cyclical development as described by earlier scientists such as Enderlein. This is supported further by the appearance of the flakes, which could be compared to the sulphur-granules, which occur in pus from tissues infected by different species of Norcardia and Actinomycetes ⁷.

From this paper it can be concluded that chronic diseases without known aetiology could be attributed to the presence of microbial growths in the body fluids. This microbial life displays pleomorphistic properties, thereby confirming earlier research and showing that pleomorphism should be considered an essential part of today's microbiological understanding.

References

¹ Critchlow, Keith (1987). Order in Space. Hong Kong. Thames and Hudson.

² Enby, Erik O. H.

(1984). Mikrobliknande bildningar i blod vid kroniska sjukdomar. (Microbe-like formations in the blood of patients with chronic diseases). Svensk Tidskrift för Biologisk Medicin, Swedish Journal of Biological Medicine. No 1. p 22-26.

³ Enby, Erik O. H.

(1983). Redovisning av fynd vid mikroskopering av levande blod från två patienter med Morbus Hodgkin och tre patienter med maligna tumörsjukdomar. (Report on the findings from the microscopic examination of fresh blood from two patients with Hodgkin's Disease and three patients with malignant tumours). Göteborg. Edition C&L Förlag. ISBN 91-970480-1-1.

⁴ Enby, Erik O. H. (1986). *Some principles of Somatic Ecology*. Journal of Alternative Medicine. Vol 4. No 3. p 7-9, 23.

⁵ Silver, S. (1980). *Anaerobic Bacteriology for the Clinical Laboratory*. C.V. Mosby Company.

⁶ Enderlein, Günther (1981). *Bakterien-Cyclogenie*. (2. Ausgabe). Hoya. Semmelweis-Verlag.

⁷ Rippon, John W. (1982). *Medical Mycology: The Pathogenic Fungi and The Pathogenic Actinomycetes.* (2nd edition). Philadelphia. W B Saunders Co.