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PSORIASIS

Prevalence, Spontaneous Course, and Genetics



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Translated from the Danish
by
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PSORIASIS

Prevalence, Spontaneous Course, and Genetics

A CENSUS STUDY ON THE PREVALENCE OF
SKIN DISEASES ON THE FAROE ISLANDS

BY
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G.E.C. GAD . COPENHAGEN
1963

1100288

Denne afhandling er af det lægevidenskabelige fakultet
ved Københavns universitet antaget til offentligt
at forsvares for den medicinske doktorgrad.

København, den 4. april 1963.

Gregers Thomsen,

h. a. dec.

*Also published as supplement number V to
Annales Societatis Scientiarum Færoensis.*

8290671

*In memory
of my mother and father,
Marie and Svend Lomholt*

Preface

It was while I was registrar to the Klaksvig Hospital in 1947-48 that I became interested in conducting a systematic study of the prevalence of psoriasis on the Faroe Islands with the main object of trying to elucidate the genetic aspects. I am greatly indebted to my then chief, the late Dr. *Vagn Stærmose*, for inspiration and encouragement in planning the work.

To me this is a natural occasion to refer in gratitude to my late father, Professor *Svend Lomholt*, M.D. It was he who introduced me into dermatology. His vivid interest in all dermatological problems and his extremely positive attitude to the help to be rendered patients with skin diseases have had a decisive influence upon my work as a dermatologist. Moreover, I am in debt to him for financial support during the months of the study.

The local authorities on the Faroe Islands were most helpful, and this applies quite particularly to the town council of Klaksvig. My colleagues on the Faroe Islands also displayed great interest in my work, and on my travels I enjoyed much hospitality in their homes. Thanks are due to Dr. *Pauli Dahl* for giving me access to the case records in the Queen Alexandrine Hospital, Thorshavn.

Without the willingness of everyone in the district a study of this nature could never have been accomplished. Allow me to extend my most cordial thanks to all the Faroese homes I visited for great helpfulness and hospitality. My thanks go quite particularly to all the psoriasis patients.

Parts of this material were published in 1953 and 1954. For years a large dermatological practice has taken all my time, and therefore the material had to wait. Through the kindness of my partner, *Gunnar Auken*, M.D., and the other members of our staff, who took upon themselves a great burden of extra work, I was completely let off daily clinical duties for a couple of months in the spring of 1962. In the course of these months I succeeded in completing this work which had been on my conscience for so many years. I want to express my gratitude to Dr. *Auken* and our staff for this help.

For urging me to complete the work and for the critical perusal of the manuscript I am thankful to *Niels Hjorth*, M.D.

In analysing the genetic material I have received valuable assistance from the University Institute of Human Genetics, Copenhagen. In this connection, my thanks go to Professor *Tage Kemp*, M.D., Director of the Institute, and quite particularly

to *Arne Nielsen*, actuary, and *Mogens Hauge*, M.D. Statistical assistance was rendered by Mr. *Arne Nielsen* and Mr. *Mogens Nyholm*, actuaries.

The literature cited does not purport to be complete. To-day the literature on psoriasis is so enormous that a complete review was out of the question, and not even intended. However, I hope that the cited literature is approximately representative of the various views.

The sketch on the first page is by *Sven Havsteen-Mikkelsen*. In addition, there is in the book a picture of a painting by one of the greatest Faroese painters, *S. J.-Mikines*. Most of the photographs were taken by Mr. *Poul Als*.

Thanks are due to Mrs. *Ann Fræmohs* for excellent secretarial assistance and to Mr. *J. A. Petersen* for drawing the pedigrees, figures, and tables.

The study was aided by grants from Christian den Tiendes Fond and Aage Bangs Fond. My thanks are due to the committees.

This book was submitted on July 26, 1962, to the Faculty of Medicine, University of Copenhagen, as a thesis for the doctorate.

Auken and Lomholt's Clinic for Skin Diseases,
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April, 1963.

Gunnar Lomholt.

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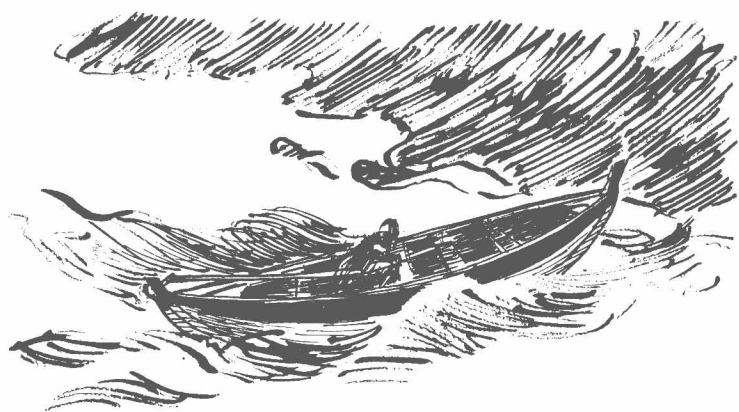
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To remember:

All is not gold that glitters.

All is not scabies that itches.

All is not psoriasis that scales.

All is not rightly remembered that is related.

»Was Psoriasis ist, weiss bis heute noch kein Mensch.«
Auspitz, 1881.

Chapter 1

Object and Approach

This oft-cited statement by *Auspitz* still stands as a challenge. Our knowledge of psoriasis—probably the most striking and also one of the most common skin diseases—is still very limited.

The main object of the present census study¹⁾ of an isolated insular population was to elucidate the genetic features of the disease. Moreover, an attempt was made to clarify its prevalence²⁾ as well as its spontaneous course, when not interrupted by treatment—factors which have so far been little known.

How interest in such a study arose and how the investigation was planned and carried through will be the subject of the following pages.

In order to qualify for the diploma as specialist in dermatology in Denmark, a doctor must of course have several years' training in dermato-venereological departments. In addition, it is a requirement to have been employed for at least two years in other branches of medicine. At the time of my study most dermatologists-to-be supplemented their education in departments of e. g. internal medicine, paediatrics, or radiology. When after 5 years in the large dermato-venereological departments in Copenhagen, in 1947, I was to complete my education as a dermatological specialist and still had to spend one year in other branches of medicine, I preferred to apply for a post on the Faroe Islands. This part of the kingdom has always greatly appealed to me, and now I had an opportunity to get acquainted with this distinctive country.

For one year, from April 1947 to April 1948 I was registrar to the hospital in Klaksvig, but also assisted the medical officer in the North Islands district (Norderøerne). Thereby, as a general practitioner, I got closely acquainted with the population in these isolated islands of the North Atlantic.

During this period I became interested in investigating the prevalence of psoriasis on the Faroe Islands. The fact is that I discovered that the disease was by no means uncommon in the district and that there was quite a high familial incidence.

The advantage of studying psoriasis on the Faroes, and not in Denmark

¹⁾ *Census*: Counting of all cases of a given disease in a well-defined area, the entire population in the area being examined.

²⁾ *Prevalence*: All cases of a disease existing at a given time in a population group. In the present paper the prevalence is stated in per cent of the total population in the district.

proper, was that I was dealing with a well-defined group of the population where I would probably be able to contact every person afflicted with the disease. Moreover, the majority of the patients' relatives would be domiciled within the same area. This ought to afford particularly favourable conditions for a genetic study. Little had so far been done in the way of treatment, as I was the first dermatologist to work on the Faroes. In my studies I was, therefore, going to try to elucidate the spontaneous course of the disease when not interrupted by treatment. I wanted to form an estimate of how many patients were essentially troubled by the disease, throughout their lives or periodically. Likewise, I was interested in studying the hitherto fairly unknown group of patients who are practically not troubled by their psoriasis, i. e. those patients who never seek medical aid.

After I had completed my year as registrar I felt so familiar with the Faroese language and with the Faroese population that I could start my special study. A complete stranger would hardly ever obtain the necessary contact with so distinctive a population as the Faroese. Although everyone on the Faroes can understand Danish, it is doubtless of great importance in a study like this one that the population can use their own language.

In the course of my activities as hospital doctor and as general practitioner through a year, I had come into contact with large parts of the population in the medical district. The work of a doctor on the Faroe Islands is very different from that in most other parts of the world. To visit a patient, e. g. on Fuglø (the Bird Island), the most easterly of the North Islands, you have to sail for 6-8 hours depending on the current and the wind. Landing on the island is often very difficult because of the heavy surf. During the winter it may be impossible for a whole month, sometimes even for two months. Despite these difficulties of landing, the doctor is expected to do his utmost to force a landing even in the most adverse weather. Quite often a line is thrown from the steep cliffs, and before you have your feet on the ground you are soaked to the waist. Under these conditions, a doctor has quite special possibilities of obtaining a relationship of mutual trust with his patients. In other instances, it may be necessary to walk for hours over the mountain to visit a patient in a village on the other side of the mountain ridge.

This contact with the population, which I had obtained in the villages and in the hospital where the operative activities had particular possibilities of arousing respect, had resulted in a mutual relationship of trust. Moreover, while working in the hospital, I had been successful in curing various skin diseases. In the consulting room I saw many dermatological cases every day, not only from the medical district, but people who travelled from other parts of the islands. In the hospital we always had some dermatological cases, not only from our own area, but from the other districts too. Thus, I had won quite a reputation as an able dermatologist. The patients were grateful for being relieved of a number of dermatological conditions which had so far been considered incurable. Small miracles, revealing hypersensitivity by patch tests, had made the popula-

tion realize that much can be done to relieve these frequently troublesome skin diseases.

Originally, it had been my intention to investigate the entire Faroese population, but I soon realized that this would take an unreasonably long time, and that by restricting the study to all inhabitants of the North Islands and Østerø (the East Island) I could accumulate a sufficient number of patients with psoriasis to permit a statistical calculation of the material.

In April 1948 I started the study by a systematic search of the whole district, visiting all households. In order to create interest in the study, I offered to examine and treat all patients with skin diseases free of charge. This would also give me an impression of which skin diseases were prevalent during the period of the study. Before starting, I applied to the municipal authorities in all municipalities, asking them to inform the population of the object of the investigation. Everywhere the authorities took a great interest in my work and offered to render every possible help.

In advance, the municipal authorities informed the population in their area that I was going to embark on this study. This was done in Klaksvig, the largest town in the district, by distributing the following paper to all households. In other localities the announcement was put up on posters in various places.

Announcement

In agreement with the Health Authorities on the Faroe Islands Dr. Lomholt will be starting in these days on a careful study of all persons with skin diseases.

Special importance will be attached to the hereditary skin disease psoriasis. Dr. Lomholt asks all those who are suffering from hereditary skin diseases to let him know. This can best be done by sending him a written note.

Moreover, Dr. Lomholt will soon be visiting every house in the village. It is of the utmost importance that everyone who has a skin disease gets into touch with Dr. Lomholt.

It is beyond doubt that it will be long before there will be another opportunity to see anyone as versed in diseases of the skin as Dr. Lomholt.

Everyone is requested to do his utmost to promote this important work which Dr. Lomholt has started. This can best be done by giving him a good reception and all the information he wants.

There will be no charge for the examination or the consultation.

For the purposes of the study I prepared 2 forms printed at the cost of the Klaksvig municipality. One was to elucidate the family history and comprised data regarding: The patient's children and grandchildren, siblings and their children, parents, parents' siblings and their children, grandparents, and possibly more remote relatives. Particular emphasis was laid on elucidating the extent of consanguinity.

The other form included the personal history and the objective findings. This form will be reproduced overleaf.

In the right-hand column of the objective findings chart I marked how often each individual site had been involved and the maximum spread of the lesions in each individual area.

In assessing this chart it must be borne in mind that it was prepared by a

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No.

Name:

Age:

Address:

Date

H I S T O R Y

1. 1. First eruption of psoriasis

Site

2. Ever quite free of psoriasis

3. Constant sites

4. Duration of free periods

max.

min.

5. Minor spread

6. Major spread

7. Extensive eruptions (number)

8. Assumed cause of exacerbation

9. How rapidly do the eruptions arise

10. Duration of major or extensive eruptions

11. Articular symptoms

12. Relation between psoriasis and articular symptoms

13. Articular diseases in the family

14. Itching

constant

during eruption

15. Best season

16. Worst season

17. When staying abroad

18. Sunbathing and seabathing

19. Exacerbation during periods of nervousness

20. Scarlet fever

Rubella

Chicken-pox

Diphtheria

Pneumonia

Rheum.fever

21. Tonsillitis

Febrile conditions

22. Measles

23. Mechanical traumas

24. Experience regarding diet espec. fats

25. Ordinary Faroese diet?

- a. Special diet
- b. Alcohol

26. Alterations in female patients

- a. Menarche
- b. During pregnancy
- c. At parturition No.
- d. During lactation
- e. When completing lactation
- f. Menopause

27. Treatment received so far?

- a. Better? Tar
- b. Unchanged? Light treatment
- c. Worse? Arsenic

28. Hospital treatment Consulted a doctor
for the first time:

29. Other diseases Tub.: Diab. mell.: Graves' dis: Gallstones:

- a. Previously
- b. Now

Comments

