

DERMATO-VENEREOLOGY

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Top 3 reports

ACADEMIC DERMATO-VENEREOLOGY IN ÖREBRO

ERUPTIVE SEBACEOUS HYPERPLASIA

KAWASAKI DISEASE: A CASE REPORT



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Managing Editor: Agneta Andersson Uppsala, Sweden agneta@medicaljournals.se



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New Year - New Appearance!

The time has come to change the look of Forum, which has remained the same for eleven years - as long as I have had the pleasure of being the editor. I hope you will appreciate the new design and colours.

In this issue we present a research report from the University of Örebro about the development of this relatively new university. As mentioned previously, we invite you to send in reports about the research in your universities for publication in Forum. From the same author, we also have another interesting report on attitudes to risky behaviour among young adults (p. 8).

On page 6 you can learn a little more about eruptive sebaceous hyperplasia, and on page 16 Petter Gjersvik gives his views on 4 years' experience on the Euromelanoma campaign. This issue also contains case reports, dissertations and quizzes, as well as continuing medical education (CME).

I would also like to remind you about the UEMS-EBDV Board Examination 2019. This will take place in Frankfurt on 2-3 August, 2019. Information regarding this exam can be seen on p. 32.

Please also make a note in your calendar regarding the 100-year celebration of ActaDV which will take place in Stockholm on 15^{th} of May 2020! See preliminary program on p. 36.

The Nordic Congress in Dermatology and Venereology is to be held soon in Göteborg. The President, John Paoli, and his team have created such an excellent programme that they have exceeded all expectations of the number of participants; the Congress is already fully booked.

1 look forward seeing many of you in Göteborg in May.

Please enjoy reading this issue!

Uppsala February 2019 AGNETA ANDERSSON Editor

> The photo on the front cover is taken from the paper by Carsten Saur Mikkelsen et al. on eruptive ssbaceous hyperplasia.

Forum for Nordic Dermato-Venereology

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Eruptive Sebaceous Hyperplasia: An Uncommon Side Effect of Systemic Corticosteroid Use in a Renal Transplant Patient

Carsten Sauer Mikkelsen¹, Luit Penninga², Gudjon Leifur Gunnarsson³ and Therese Beate Abusland⁴

¹Specialist in Dermato-Venereology, Privat Practise, Brønderslev, Denmark, ²Chief of Department, Ilulissat Hospital, Avannaa Region, Ilulissat, Greenland, ³Specialist in Plastic Surgery, Hospital in Skien, Skien, Norway, and ⁴Specialist in Dermato-Venereology, Aalesund Sygehus, Aalesund, Norway. E-mail: c.s.mik-kelsen@hotmail.com





Introduction

Sebaceous hyperplasia is a benign disorder of the sebaceous glands caused by an overabundance of sebocytes. This high number of sebocytes creates an enlargement of the sebaceous gland which can proliferate to several times its regular size. The sebacceous glands produce an oily substance sebum, which presents as flesh coloured or yellowish, shiny bumps (1).

Sebaceous hyperplasia primarily occurs in the face, though sebaceous glands are localised everywhere on the body, except for the palms of the hands and soles of the feet (1, 2). Newly formed papules often swell with sweating which is pathognomic for the disorder. Sebaceous glands are commonly associated with hair follicles, but are also present in hairless regions of the skin (1).

The symptoms of sebaceous hyperplasia are 1–5 mm large papules on the skin, mainly on the forehead, nose and cheeks, and seborrhoeic facial skin. The papules may have cauliflower shape. Eruptive sebaceous hyperplasia occurs primarily in men

(2). The disorder is seldom in young people, but is typically seen in middle-aged and elderly people due to the ageing proces in the sebaceous gland (3).

Eruptive sebaceous hyperplasia can occur as an inherited disorder, which is called familial eruptive sebaceous hyperplasia (4). Sebaceous hyperplasia

has also been reported in patients who are treated with immunsuppressive agents following solid organ transplantation. Secondary eruptive familial hyperplasia has predominantly been associated with treatment with the calcineurin inhibitor cyclosporin following organ transplantation (2, 5). It has been suggested that cyclosporin might stimulate sebaceous gland proliferation (5). One study reported the occurrence of sebaceous hyperplasia in 16% of heart transplant patients treated with cyclosporin (2). In contrast, only one patient treated with

the calcineuri inhibitor tacrolimus has been reported with sebaceous hyperplasia (6). Furthermore, there has only been one report on the occurrence of eruptive sebaceous hyperplasia associated with immunosuppression with prednisolone (7). In the present case we also report on the occurrence of sebaceous hyperplasia associated with corticosteroid use.

Eruptive sebaceous hyperplasia is a benign disorder, and no malignant proliferation has been reported. Patients often ask for treatment due to cosmetic reasons, particularly because the disorder primarily affects the face. Isotretoin has been found to be effective in the treatment of eruptive sebaceous hyperplasia (4, 6). Treatment with CO₂ laser has also been found to be successful (6).

As mentioned above eruptive sebaceous hyperplasia is a benign disorder. Special care should though be taken when skin diseases occur in organ transplant recipients receiving immunosuppressive agents, as transplant recipients are at high risk of developing other skin diseases, including skin cancers.

Simultaneous occurrence of eruptive hyperplasia and basal cell carcinoma in a transplant has also been reported. So when in doubt, diagnosis of skin diseases in organ transplant patients should be confirmed histologically.

Eruptive sebaceous hyperplasia is a benign disorder, and no malignant proliferation has been reported. Patients often ask for treatment due to cosmetic reasons, particularly because the disorder primarily affects the face.

CASE PRESENTATION

A 49-year-old Caucasian man received a renal transplant 25 years ago followed by long-term systemic treatment with prednisolone, and short-term treatment with cyclosporin and azathioprine. He recently presented with the sudden appearance of multiple asymptomatic growths. Skin examination revealed multiple 1–5 mm, soft, skin-coloured to yellowish, dome-shaped, umbilicated papules primary on the forehead but also bilaterally on the lateral/malar cheeks, clinically suggestive and confirmed histologically as sebaceous hyperplasia



Fig. 1. Multiple umbilicated papules on the forehead of the patient 25 years after renal transplantation.

(Fig. 1). He was treated with locally retinoid and ${\rm CO}_2$ laser coagulation with 0.8 Watt defocused.

CONCLUSION

Eruptive sebaceous hyperplasia is a well-described dermatological disorder, common in immunsuppressed organ transplant

recipients. To our knowledge, this is only the second reported case of eruptive sebaceous hyperplasia secondary to the use of prednisone. This case brings awareness to the unique side effect of prednisone inducing sebaceous hyperplasia.

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Dermato-Venereology in the Nordic Countries

A Vision of Academic Dermato-Venereology in Örebro, Sweden

MAGNUS LINDBERG

Department of Dermatology, University Hospital Örebro, SE-701 85 Örebro, Sweden. E-mail: magnus. actan@telia.com



The history of Örebro as a town goes back at least to the lacksquare 12th century. The hospital in Örebro also has a history going back several hundred years. The department of dermatology-venereology was founded around 1950 and serves the county and region of Örebro. Approximately 15 years ago the hospital changed its name to Örebro University Hospital indicating an increased focus on education and research.

As a university city, however, Örebro is young. The university was established as recently as 1999. At that time there was no medical school. Medicine (including dermatology) as an academic subject functioned as a medical faculty (set

up in 2001) within the framework of the School of Health and Medicine. After 3 applications by the university, in 2010 the government granted permission for a medical school to be set up and students to be examined for the medical degree. The first medical students were admitted in 2011.

has been to transform the dermatology clinic into a clinic with a more academic way of thinking and to interest younger colleagues and students to start research in the field of dermatologyvenereology.

"The goal during recent years

was adapted to the Bologna model, with one scientific project during semester 5-6 with a focus on the Bachelor's degree, and one during semester 10 with a focus on the Master's degree. The programme outline comprises 6 themes and 4 stages. There are no specific disciplines; these are incorporated into one of the 6 themes, with a mix of pre-clinical and clinical disciplines (Fig. 1). The programme includes more biochemistry at the start, more clinical studies later on, and professional development throughout. Dermatology-venereology is part of theme "Defence", together with inflammation, immunology, microbiology, basic tumour biology, infectious diseases, rheumatology, immune-mediated

> diseases, and relevant pharmacology. The theme Defence is represented across all 4 stages. This entails contact with the students throughout their whole study period (11 terms), and implies close collaboration between the disciplines in teaching, increasing the possibility of research collaboration within the School of Medical Sciences.

High-quality academic work in the field of venereology has been performed previously in the dermatology department. This has resulted in 2 PhD thesis in dermatology-venereology, the first by Harald Moi, now Professor Emeritus in Oslo, in 1990 (2), and the second by Lars Falk, now Associate Professor in Linköping, in 2004 (3). However, they were PhD registrars in Uppsala and Linköping Universities, respectively, at the time. The first PhD thesis presented in dermatology-venereology from Örebro University was performed by Anna Josefson, senior consultant at the dermatology department, in 2010 (4). The main tutor was engaged part-time at the university especially for this thesis. The work was a continuation and follow-up of hand eczema and nickel allergy studies that had begun in 1980 by Birgitta Stymne and Lena Widström, both senior consultants at the clinic at that time. In 2013. senior consultant Maria Palmetun Ekbäck presented her thesis on aspects of quality of life in hirsutism (5). This was the first thesis for which the main tutor was active at the clinic.

The concept of academic dermato-venereology in Örebro in a wider sense can be said to have begun in 2007, when the

During the first 5 years, the focus of the programme was on building and consolidating the structure and quality of teaching at the medical school, rather than on research. Today the medical school is part of the School of Medical Sciences, which was formed 2 years ago (1). This has led to stronger integration of education and research, and a more academic approach.

From its inception, the programme for the School of Medicine

Stage IV: Medical deepening; complex medical problems, emergency medicine Stage III: Diagnostics, therapy, prevention Stage II: Health and disease Stage I: Organ, cell, and molecule

Fig. 1. Outline of the stages in the medical programme. All 6 themes are involved in all stages (Respiration and circulation; Neurology and locomotion; Nutrition, metabolism and elimination; Defense; Reproduction and development and Sense and mind).

first academic position was established at the clinic; an adjunct professor in dermatology (Magnus Lindberg), who held a part-time senior consultant position. When the Medical School programme started a teaching position, Professor in Dermatology, was created at the university in 2012. Professor Magnus Lindberg still holds that position. (To date, this is the only paid academic position in dermatology-venereology in Örebro.) Colleges at the department of dermatology-venereology are engaged in teaching, with both clinical training and giving lectures as a part of their clinical positions. Currently, there are 3 dermatologists at the clinic who have a PhD, but only the Professor has a higher academic degree.

The goal during recent years has been to transform the dermatology clinic into a clinic with a more academic way of thinking and to interest younger colleagues and students to start research in the field of dermatology-venereology. The new medical school is essential in this, as teaching students in the clinic helps in implementing the idea of academic work. Secondly the exposure of students to dermatology-venereology helps recruit students for both Bachelor's and Master's degree projects. Having students at the clinic also increases awareness of education among the staff. In addition, the structure of the

medical school programme facilitates the establishment of collaboration between disciplines. Within the School of Medical Sciences, we have expertise in most research areas, from genetics, cellular biology, inflammation, and immunology to epidemiology. As we meet on daily or weekly basis (at least for coffee) the opportunities to establish collaborations are good. Besides the research groups, the county (Region Örebro) provides laboratory facilities that can be used for research at the hospital clinics.

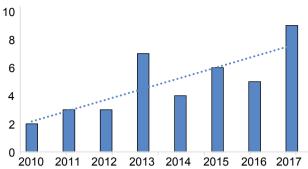
IN PRACTICE

The clinic can provide clinical material and clinically relevant questions. Being a small unit starting from a low level of activity, we continuously strive to initiate basic research projects. Such projects, however, must be realistic, possible to perform with small resources and/or in collaboration with others, and could be the starting point for further research. The main research interests, from the clinical point of view, have been aspects of hand eczema, quality of life in skin diseases, contact allergy, and non-melanoma skin cancer (basal cell cancer). Based on our concept of implementing academy at the dermatology clinic we have performed several minor

Table I. Type of project and methods used/available during 2010–2017. Research by senior researchers excluded

Educational level	Number of projects	Methods	Publications
Bachelor's degree	10 (1 ongoing)	Clinical follow-up of treatment	(6–8)
-		Compiling clinical data concerning skin cancers	
		Systematic literature reviews	
		Evaluation of different QoL instruments	
		Microbiological methods	
		Histology; immunohistochemistry	
Master's degree	7 (1 ongoing)	Patch-testing	3 manuscripts in
· ·	· · · · · · · · · · · · · · · · · · ·	Compiling and evaluation of population-based questionnaires	process
		QoL instruments	1
PhD (2 completed in 2010	4 in progress (2 with	Člinical follow-up	(9–11)
and 2013)	main tutors in other	Patch-testing	Publication for
,	research groups)	Compilation of clinical data	thesis defended in
		Compilation of register data	2010 and 2013, not
		Meta-analysis	included here
		Questionnaires	
		Qualitative analysis of narratives	
		Epidemiology	
		QoL instruments	
		Skin exposure measurements	
		Skin penetration	
		Cell cultures and toxicological evaluation of exposure to harmful stimuli	
		PCR	
		Analysis of skin inflammation markers	
Work included in doctors'	5	Patch-test register registration (EpiReg)	(8, 12–14)
specialist medical		Compilation of results from the patch-test register	
training for dermatology-		QoL instruments	
venereology		Microbiological methods and clinical follow-up (STI)	
		Histochemistry, molecular techniques, PCR, clinical evaluations	

QoL: quality of life; EpiReg: national register for patch-test results; STI: sexually-transmitted infections.



 $\it Fig.~2$. Number of publications in peer-reviewed journals. Dotted line: trend.

student projects and projects for MDs, as part of their specialization in dermatology-venereology. At present there are 2 students studying for PhDs at the clinic (an MD working on hand eczema and risk factors/prognosis; and an MD working with transport proteins in basal cell carcinoma). Student projects often involve compiling already collected, but not yet analysed, data. Table I summarizes the types of projects and methodology used since 2010. We have chosen to make dermatology-venereology one research group, with a focus on the areas mentioned previously. There has been a steady, although slow, flow of publications in peer-reviewed journals from this research group (Fig. 2).

PROS AND CONS OF ACADEMIC DERMATOLOGY IN ÖREBRO

Pros

- High level of activity and involvement in the medical programme.
- An interest in research and education at the dermatology department.
- Close collaboration and contacts with other disciplines at the School of Medical Sciences, e.g. about methodological aspects.
- Facilities for most type of project available.
- Several small local funds for smaller and basic projects available.

Cons

- Few dermatological colleagues with higher academic degrees (none at present).
- No co-workers at the department other than dermatologists with master or PhD degrees in dermatology.
- A high (and increasing) load of clinical work at the dermatology department, decreasing possibility to allocate time for research work.
- Difficulty obtaining major funding for research work in our field of interest.

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Dermato-Venereology in the Nordic Countries

Attitudes to Risky Behaviour Among Young Adults Treated for Chlamydia at an STI Clinic: A Qualitative Study

Margret Lindberg¹, Magnus Lindberg¹, Ann-Britt Ivarsson²† and Annsofie Adolfsson²

¹Department of Dermato-Venereology, Örebro University Hospital, ²Faculty of Medicine, Section of Medical Sciences, and ³Department of Health Sciences, Örebro University, Örebro, Sweden †Deceased 2016-09-08

This study describes the attitudes to risk behaviour among patients diagnosed with a chlamydia infection at a sexually transmitted infection (STI) clinic. Qualitative interviews were conducted face to face with 18 participants, aged 18–30 years, with a confirmed diagnosis of chlamydia infection. An interview guide was used and participants described the behaviour that had led to their infection. Qualitative content analysis was performed on the theme of risk. A common denominator among participants was risky behaviour in sexual relations when using alcohol, while very few participants took unnecessary risks in life in general. Of the 18 participants, 16 had been tested for STIs previously, and 10 had previously had an STI.

Key words: risk; sexually transmitted infection; young adults; qualitative method; content analysis.

Corr: Margret Lindberg, Department of Dermato-Venereology, Örebro University Hospital, SE-701 85 Örebro, Sweden. E-mail: margret.lindberg@regionorebrolan.se.

Earlier studies suggest that young people

have an adequate knowledge of STIs. De-

spite this, they engage in risky behaviour,

by not using condoms.

Sexually transmitted infections (STIs) are common in Europe, especially among young adults. The World Health Organization (WHO) estimated that there were 105.7 million new cases of *Chlamydia trachomatis* (CT) worldwide in 2008; an increase of 4.2 million cases (4.2 %) compared with 2005 (1, 2). CT is the most common STI in Sweden; in 2002 the number of confirmed cases of CT was 24,691, and by 2015 this had increased to 37,809. The largest increase was in the 15–30 year-old age-group (3).

To understand why the number of infections is increasing, we need to understand what individuals think and feel with regards to their sexual behav-

iour. The WHO defined health, in a broad sense, in its 1948 Constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (4).

The WHO has also defined sexual health: "Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled." (5).

In Europe there is a new policy framework for health and well-being, "Health 2020". This framework aims to support actions across governments and society to "significantly

improve the health and well-being of populations, reduce health inequalities, strengthen public health and ensure people centred health systems that are universal, equitable, sustainable and of high quality" (6).

Society has evolved over recent decades, with a changed worldview, partially due to increased migration and communication opportunities, not least via the Internet, which has

> opened new opportunities for contact with different groups of people. Research has shown that young people today are influenced by many different thought systems, through which they find ways of dealing with intimate relationships.

Internet communication encompasses the field of sexuality, bringing both opportunities and risks. It increases a person's opportunities to gain knowledge and explore their own sexuality. However, it also increases the risk of meeting people pretending to be other than they really are. We live in a period of generally higher risk-taking in sexual contexts than previously (7).

Love ideology, which connects sexuality with love, has also been changing over many years, with the resulting dissolution of the "romantic love complex" that governs the forms of our intimate relationships. Many people have increasing numbers of sexual relationships during a lifetime, and few now hold the view that sex should occur only in steady relationships (7).

Earlier studies suggest that young people have an adequate knowledge of STIs. Despite this, they engage in risky behaviour, by not using condoms. Many people who contract an STI have had a false sense of security; feeling that they could not contract an infection because they "know and trust their partner." (8).

In spring 2006, the Swedish Public Health Institute published a report entitled "Youth and Sexuality" (7); a review of 90 research studies, which showed that, in general, people take higher risks in sexual contacts currently than in earlier decades. Young people have a more permissive attitude towards sexual contacts and many engage in riskier behaviour when using alcohol (The Swedish Institute for Infectious Disease Control; SMI; 9).

One Internet-based study, commissioned by the Swedish government, found that, in the 15–29 years age-group, those who lived in more socially deprived communities engaged in riskier sexual behaviour, and only 50% of these young people used condoms when engaging in sexual behaviour with new or casual partners. This study also showed that twice as many young adults were infected with STIs compared with the teenage group. The reason for this is that teenagers are provided with free and confidentially distributed condoms by youth health clinics, whereas young adults do not qualify for such assistance (10).

A study on condom usage with 4,062 participants (of whom 1,062 were from Sweden) was published in 2016. Comparison with a similar study conducted in 2013 determined that condom usage had fallen by 5% in the 21–35 years age-group (11).

The aim of the present study was to evaluate the risky behaviour of individuals who consulted the STI clinic for an STI test and were diagnosed with a CT infection.

Метнор

This is a qualitative study with an inductive approach. The aim of a qualitative study is to describe, explain and create deeper understanding of lived experience.

In qualitative research the result does not come from statistical processes or quantitative approaches. Instead, the results often provide descriptions and stories of social, emotional phenomena. The aim is to understand the characteristics and differences described by people when they are in different contexts, situations and environments. Often, the focus is on a single, or just a few, phenomenon. Knowledge is gained on a deeper, more detailed level and can provide a better understanding of phenomena than can be captured quantitatively. Qualitative research can be used to investigate

people's perceptions, experiences and opinions in relation to a particular phenomenon. This entails seeking understanding and creating an idea of what is being investigated. The criticism that is often made of qualitative studies is the difficulty of generalizability. Instead, the concept of transferability can be used. Transferability is usually defined as similarity between different contexts. Whether a study is conducted using a qualitative or quantitative method, there may be limitations in transferability. Therefore, the selection strategy is equally important in both types of study (12).

The qualitative research methodology offers a number of possible approaches, such as grounded theory, phenomenology and content analysis. The choice of method is determined by the aim of the study (12).

The method used in the current study was qualitative content analysis, based on the ideas of Krippendorff (13). The method was described in detail by Graneheim & Lundman (14). This study included 18 participants aged 18–30 years, who visited an STI clinic and who were confirmed to have a chlamydia infection.

This study, conducted from October 2013 to May 2014, used a qualitative interview method (12, 15) and was performed at the STI clinic of the University Hospital in Örebro, Sweden. The study was approved by the Regional Ethics Committee, Uppsala, 2009/322.

Participants

Patients at an STI clinic aged 18–30 years where included, and who were confirmed to have a chlamydia infection. Only patients confirmed to have a chlamydia infection were invited to join the study. Both men and women were included consecutively.

The clinic nurse asked the patients about participation. They were provided with verbal and written information regarding the study. If a patient agreed to participate, he/she signed a consent form and an appointment for an interview, which took place in a private and confidential room at the STI clinic. Twenty participants were invited to participate and all accepted. Twenty interviews were conducted, but two were lost due to technical problems during recording. The remaining 18 interviews were processed using content analysis (13, 14).

All participants were guaranteed full confidentiality and were informed that they could discontinue participation at any time if they wished. All participants were completely unknown to the interviewer at the time of the interviews.

Table I. Interview guide

Background

- 1. Reason for visiting the STI clinic?
- 2. Previous STI tests?
- Previous STIs?
- 4. How many sexual contacts did you have in the last year and what did you know about your partners?

Theme

- In what way do you establish new contacts? Internet, restaurant, friends...
- Do you feel that you expose yourself to risks in sexual relations? Explain and tell me your thoughts. What does the concept of such risks mean to you? Describe.
- 7. Do you expose yourself to risks ordinarily? Describe.
- 8. Do you use alcohol or drugs? If so, to what extent? Has this influenced you in any way in your choices?
- 9. Use of condoms? Information (STI)?

Data collection

The interview guide for this qualitative study (Table I), covered the following areas: reason for visit, previous STI tests, previous STIs, number of partners in the last year, how the contacts were created in new relationships, if the participants felt they exposed themselves to risks in these sexual relations and what the concept of such risks implies. Is risk-taking part of their life philosophy in general? What was the relationship of alcohol and drugs in the risk-taking behaviour? Did alcohol/drugs have any influence on the behaviour? Additional questions were about condom usage and how the participants had received information about STIs. The interviews were recorded on tape. The participants were anonymous in the recordings, which were transcribed verbatim by a secretary for further analysis (14). Background data of the interviewees are shown in Table II.

Data analysis

In the study group, 16 of the patients had previously tested negative for infections. Among these were 3 patients who tested themselves regularly online. Five of the patients previously tested had been tested once before, 3 patients had been tested 3 times before and 5 patients had been tested more than 3 times.

The number of sexual partners that patients had had contact with during the last year ranged from one to 13 (see Table I).

The transcribed interviews were read several times by the author in order to gain a comprehensive impression of the interviews. Codes were written in the margin. A summary of each interview was compiled. The codes were extracted to a code document (16) and then searches were made for parts of the text relevant to the aim. Meaning-bearing units were extracted from the texts that were assessed as relevant. The

Table II. Background data for the participants at an STI clinic in the central of Sweden

Informant	Age	Sex	Sexual partners last 12 months	Previous STI tests	Previous STIs	Reason for contact
1	23	F	13	Yes	Yes	Prompted
2	21	F	2	No	No	Prompted
3	24	M	5–6	Yes	No	Symptoms
4	28	F	3	Yes	Yes	Prompted
5	20	M	5	No	No	Check-up
6	19	F	4	Yes	No	Check-up
7	25	F	3	Yes	No	Prompted
8	23	F	6	Yes	Yes	Check-up
9	24	F	12	Yes	Yes	Check-up
10	28	F	Unsure	Yes	Yes	Check-up
11	29	F	6	Yes	Yes	Symptoms
12	21	F	12	Yes	No	Prompted
13	23	F	4–5	Yes	Yes	Check-up
14	27	F	3	Yes	No	Check-up
15	26	M	Do not know	Yes	Yes	Prompted
16	29	M	1	Yes	No	Prompted
17	28	F	3	Yes	No	Check-up
18	24	F	6	Yes	No	Check-up

STI: sexually transmitted infection; M:male; F: female.

meaning-bearing units were further developed into groups of codes and abstracted categories.

The categories describe the manifest content of the transcripts of all the interviews (Table II). To describe the latent content of the interviews, sub-themes were formed and, finally, the theme was identified. The analysis of the transcript was performed using qualitative content analysis based on the method by Graneheim & Lundman (14).

RESULTS

The theme of this study was "Risk-taking in sexual behaviour." This theme is made up of five sub-themes: (i) Meeting unfamiliar people at a bar or online; (ii) The resulting relationship is casual and the parties will probably not meet again; (iii) When alcohol is in the mix, judgement is impaired; (iv) Using condoms is embarrassing and awkward; (v) Drugs use is minimal among participants in the study, but more common in society in general (Table II).

Meeting unfamiliar people at a bar or online

The study participants made initial contact with potential sex partners in a variety of ways. Contacts were made through social networks, through friends and acquaintances, at parties or bars. Another major factor is online contacts with strangers.

Table III. Meaning-bearings units, codes, categories, sub-themes and themes from the content analysis of the interviews

Meaning-bearing unit	Code	Category	Sub-theme	Theme
Making first contact online, at parties, pubs and bars, most often at a bar	Contact	Contact with strangers	Meeting unfamiliar people at a bar or online The resulting relationship is casual and the	
Unknown contacts may entail risks that could have negative consequences	Sexual relations	STI	parties will probably not meet again.	
Easier to make contact when intoxicated and less inhibited	Alcohol	Judgement impaired	When alcohol is in the mix, judgement is impaired.	
Easier not to use a condom to avoid a debate about using one	Condom use	No motivation to use condom	Using condoms is embarrassing and awkward.	
Drug use not a factor in the sexual relations of the participants	Drugs	Deterrent effects	Drug use was minimal among participants in the study, but more common in society.	Risk-taking in sexual behaviour

STI: sexually transmitted infection.

"This superficial network is indeed a gamble and a crap shoot. There is tremendous risk with this sort of hook-up."

"Risk is not something you are consciously thinking about or are aware of or even care about, but that is the nature of the risk in sexual behaviour. It's when your guard is down that things can happen."

Meeting someone at a bar is not the ideal way to get to know someone, as both parties may be under the influence of alcohol. Many of the participants mentioned that the best way to meet someone is through mutual friends or acquaintances. However, they would forget their own advice and engage in risky sexual behaviour or unprotected sex with strangers and subsequently would often second-guess such actions.

"What was I thinking..."

This is the nature of sexual behaviour when alcohol influences inhibition. Everything is happening in the moment and feelings are running on overdrive.

"It is what it is...it just happens. But before it happens I know that it isn't so smart."

Most of the interviewees confessed that they do take risks. People who are aware of risks and take them anyway are more likely to accept the consequences of their risky behaviour. Some of the participants exposed themselv—es to more risky behaviour and some were inclined to take smaller risks, but all were aware that they were taking risks and took them anyway.

The resulting relationship is casual and the parties will probably not meet again

The interviewees explained that if, when they first meet a person, they are inclined to trust their new contact, they will see them as a lower-risk sexual partner. If they are unsure about the person and get odd vibes from their potential contact, they view them as a greater risk. Alcohol can influence this in the opposite direction. The interviewees were very clear in that

they did not think the same way when they were drinking as they did when sober. The sexual tension in such situations involves a different kind of thinking or an absence of thinking. They were aware of the risks, but took them anyway, recklessly and in the heat of the moment.

"Risk is something that can exist but it doesn't need to be negative. The risk is a consequence of something. When talking about risks, it is important to talk about the same thing."

"You are seeking acknowledgement."

Some of the interviewees explained that the riskier the behaviour that they were involved the more uncomfortable the consequences could be. As one woman relates:

"It gets a bit dicey when you end up with somebody who does not understand that when you say no...it means no."

Some of the interviewees related that they had had sex with people who were completely unknown to them and some also had a very poor idea of how many sexual partners they had been with in the last year.

"Several partners, I met only once."

Other interviewees described "getting a high when taking risks." The interviewees might be more cautious in their approach to driving a car than to possibly getting infected with chlamydia. In the back of their minds they would be rationalizing, thinking that the infection is curable with antibiotics.

"Antibiotics can cure a dose of chlamydia..."

When alcohol is in the mix, judgement is impaired

All interviewees drank alcohol and were well aware of the risks with consuming alcohol. Only 3 of the 18 interviewees felt that they had low alcohol consumption. Each had their own rationale and reasons to justify their level of alcohol consumption. Even those with a high level of consumption were aware of the associated additional risks.

One of the justifications was that everyone else was drinking and they were therefore going along with the crowd. One interviewee admitted to working specifically in order to afford buying alcohol and participating in nightlife and social activities.

"If you are drunk you are obviously not thinking very clearly and you can end up taking risks."

The interviewees acknowledge that they put themselves in compromising situations when under the influence of alcohol. When sober, they would not even consider undertaking the behaviours they engaged in when drinking.

Interviewees described that they would regret making the decision to have sex in a drunken state. These people were clear that having sex with strangers represented risky behaviour. Even though they were normally aware that this sort of risk-taking was not a good idea, in the drunken state and the heat of the moment they went with their impulses.

"You are in the heat of the moment and you see how far it goes. It's fun...exciting."

These types of situations illustrate what happens when individuals go along with the crowd by consuming alcohol and engaging in risky sexual behaviour. Judgement is impaired and behaviour is influenced accordingly.

"When you're drunk, you don't use a condom, thus taking more risks."

Only one of the interviewees said that they used alcohol because it tasted good, especially in social contexts, such as sharing a meal. The person with the lowest consumption described their usage as:

"I drink a little alcohol when I hang out with nice people."

Using condoms is embarrassing and awkward

Regarding information about sexually transmitted diseases, it appears that all of the participants had received information at some time, from either school, parents or friends, about the importance of condom use as protection against sexually transmitted diseases.

Choosing not to use a condom is risky behaviour. Most of the interviewees did not use condoms. The majority of interviewees considered condom use to be a matter of course, but they had still somehow contracted chlamydia. The explanations for not using condoms varied and the most frequent were that it was embarrassing and awkward, not to mention there was a degree of difficulty. The combination of the awkwardness of using a condom and the embarrassment in suggesting it sometimes discouraged use of condoms.

"Nobody proposes use of a condom, since it's embarrassing."

"The condom thing ruins the moment and you basically don't care when you're drunk."

"It is what it is and it is pretty obvious, you get carried away even though it is not so smart. But when you are drinking it is easier to just not bother about it."

One informant described that they would be forced to argue if they wanted to use a condom and this would have the effect of ruining the moment. Those who insist on using a condom put themselves at risk of being rejected because of it. Another informant said that if they were going to have sex abroad, they would always use a condom.

"I am convinced that condoms make a difference, but it isn't always the actual case realistically."

"I usually regret it the day after if I didn't use one."

Throughout the interviews, the interviewees said that when alcohol was in the mix and they became intoxicated, judgement went out the window and condom usage did not occur.

Drug use is minimal among participants in the study, but more common in society

The interview participants did not use drugs. Most of them stated that they had never used drugs, some admitted to having experimented but were not current drug users. The interviewees drew a line between high alcohol consumption and the decision not to use drugs.

Discussion

The new European health policy framework (6) aims to support action across governments and society. How can healthcare professionals in everyday care contribute to reducing ill health? Meetings between healthcare professionals and patients are important for raising awareness of risk behaviour. Prevention work is invaluable. Communication between people at all levels of care can contribute to a change in lifestyle and living conditions. A person is never more receptive than when he/she is worried. Social media is good and innovative in many ways, but it can also contribute to influencing young people who are building a platform in adulthood. Not everyone is capable of dealing with social media in a sufficiently mature way, so some people may expose themselves to risks without thinking about consequences.

The common factor among the interviewees, who had all contracted chlamydia, was risky sexual behaviour. The participants were aware that having unprotected sex with people they did not know well was risky sexual behaviour, as also described by Carré (17). The study shows that, in the bar and pub environment, where alcohol is being consumed in excess,

risky behaviour increases with alcohol use. Having casual sex under the influence of alcohol was a way for participants to gain personal acknowledgement.

In recent decades, since the outbreak of the HIV virus, research has increased regarding sexual risk-taking behaviour among young people (8, 18). A large part of this research is quantitative in nature and involves mapping the behaviours of young people. Common denominators in risky sexual behaviour are sporadic condom use, casual sexual relationships and a lower age of sexual debut. Statistics available about sexually transmitted disease and unwanted pregnancy confirm that many young people are practicing unprotected sex, or "one night stands" (10, 19).

Although it appears that almost all participants were aware of the benefit and value of using condoms as protection, more than half did not always use them. Many people feel a reason not to use them is inconvenience or perceived reduction in the pleasure of having sex (20). Alcohol consumption has a big influence on the decision-making process regarding whether or not to use a condom. It appears that it only takes one or two drinks to influence judgement toward the view that it is not necessary to use a condom. The results of this study are consistent with other studies showing that condom usage has decreased among young adults.

In a Swedish study performed at Gothenburg University (10), it was found that young adults are taking just as many risks as teenagers. However, young adults have less access to contraceptives, as teenagers are provided with free contraceptives through the healthcare system (10). In a recent study by RFSU, an organization in Sweden, that provides information on sexual behaviour to Swedish people, it was found that condom usage had fallen from 48% in 2013 to 43% in 2016 in the 21-35 years age-group (11). According to the report "Alcohol and sexual risks taken" (21) there is a correlation between lower education levels, unemployment and instances of unprotected anal intercourse. It was also found that people who are in the immigration process are more prone to sexually risky behaviour (9). Among exchange students from a Swedish university, a cross-sectional study was conducted with 136 participants, using a web survey with questions about sexual behaviour, self-esteem and psychological well-being. Participants rated their health as good and the majority of them participated before departure in information sessions that addressed preventive efforts on HIV/STIs and safer sex, but sexual risk behaviour during exchange studies was reported (22).

An example of a study that shows, in a very interesting way, how qualitative research can be designed, in addition to giving an account of the outcome, is "Individual experiences following

a 6-month exercise intervention: A qualitative study." It is possible to follow the entire research step by step (23).

There was no difficulty in recruiting participants. All respondents agreed to participate. Eighteen interviews were analysed and the results were used as the basis for this study. The theme was "risk-taking in sexual behaviour". The theme consists of several sub-themes: "Meeting unfamiliar people at a bar or online," "The resulting relationship is casual and the parties will probably not meet again," "When alcohol is in the mix, judgement is impaired", "Using condoms is embarrassing and awkward," "Drug use is minimal among participants in the study, but more common in society." One positive aspect of the qualitative interview method is that it makes it possible for an interviewee to open up and reveal things about their personal and private life.

Generally speaking, participants took very few risks in other situations in life. Most described themselves as cautious and responsible. For instance, they discussed their concerns about driving, among other aspects of their everyday lives. Their sexually risky behaviour under the influence of alcohol contrasted with their otherwise conservative approach to risk. An individual's sex life is of a private nature; there is no outside judgement on the behaviour in the moment.

The interviewees were more sensitive to risk-taking when they were in the public eye and were scrutinized by their surroundings. In the interviews, they were very open and honest about their sex lives and their decision-making processes.

Conclusion

The results of this study confirm that alcohol consumption was a major factor in the interviewees' propensity for risky behaviour in sexual relations. Their risk-taking in other situations had a large influence on whether they might expose themselves to environments that allowed or encouraged risky behaviour.

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Dermato-Venereology in the Nordic Countries

Four Years of Euromelanoma Skin Cancer Awareness Campaign in Norway 2014–2017

Petter Gjersvik^{1,2*}, Jon Langeland³, Mona Stensrud⁴ and Ingrid Roscher²

¹Institute of Clinical Medicine, University of Oslo, ²Department of Dermatology, Oslo University Hospital, ³Hudklinikken, ⁴Norwegian Cancer Society, Oslo, Norway. *E-mail: petter.gjersvik@medisin.uio.no

European countries since 2000 (1). Norway, with a high incidence and mortality of cutaneous melanoma (2, 3), joined the Euromelanoma campaign in 2014. Here, we report our experience from 4 years of Euromelanoma in Norway.

METHODS

Norway has approximately 5.2 million inhabitants and about 160 dermatologists. A loosely organized public health education campaign was initiated in May each year, based on advice, leaflets and posters from the Euromelanoma network (1) in close cooperation with the Norwegian Cancer Society. Websites were created, updated and/or translated, social media messages were sent out, and a short video film on melanoma were shown on general practitioners' waiting rooms. National and local newspapers, radio stations and television stations were approached for interviews and feature articles.

Persons with perceived high risk of skin cancer and/or with what they thought was a suspicious skin lesion, were invited to attend a skin examination screening on the day of the campaign. Appointment with a dermatology department or practising dermatologist involved in the campaign were done through a centralized telephone or online service. Questionnaires were used to collect relevant demographic, epidemiological and clinical data of those screened. All clinically suspicious lesions were excised on the same day (or the next day) and examined by a pathologist.

RESULTS

The 4 campaigns resulted in more than 900 newspaper articles and radio or television appearances and more than 130,000 visits to the Norwegian Euromelanoma and cancer society websites promoting

healthy sun habits and explaining early signs of melanoma.

Skin examinations were performed by 50–70 dermatologists each year at both public hospitals and private clinics. In total,

Table I. Persons screened for skin cancer at annual Euromelanoma campaigns in Norway 2014–2017

	2014	2015	2016	2017
Persons, n	1,450	1,322	1,290	1,219
Mean age, years	48	52	46	47
Women, %	NR	NR	63	65
In situ melanoma, n (%)	3 (0.21)	2 (0.15)	3 (0.23)	3 (0.25)
Invasive melanoma, n (%)	5 (0.34)	9 (0.68)	4 (0.31)	4 (0.33)
Breslow thickness, mm	≤0.75	0.6->2.0	0.2-1.2	0.4-1.0
Basal cell carcinoma, na	17	52	25	11
Squamous cell carcinoma, n	4	5	0	0

^aIncluding multiple basal cell carcinomas in some individuals. NR: not registered

5,281 persons a with mean age of 46–52 years, > 60% females, were examined (Table I). Eleven persons (0.21%) were diagnosed with a histologically confirmed *in situ* melanoma and 22 (0.42%) with an invasive melanoma, most with a Breslow thickness < 1.0 mm. In addition, 114 keratinocyte skin cancers, mostly basal cell carcinomas, were diagnosed.

Discussion

The impact of disease awareness campaigns is hard to assess. Except for internal assessment of logistics to improve next year's campaign, no formal evaluation of the 4 Euromelanoma campaigns in Norway has been performed. However, considering the high media attention, we believe that the campaigns have had a positive influence on the general public's attitudes towards more healthy sun habits, preventive measures against

skin cancer and awareness of early signs of skin cancer, particularly melanoma.

The number of diagnosed melanomas was low, and most melanomas were *in situ* lesions or thin melanomas with a very good prognosis. This is in accordance with results from a Euromelanoma

campaign in Sweden (4). In both countries, all clinically suspicious lesions were excised as part of the Euromelanoma screening consultation. This is in contrast to Euromelanoma campaigns in most other countries, reporting only rates for

"We believe that campaigns to prevent melanoma and other forms of skin cancer should focus more on the need for more healthy sun habits, particularly avoiding sunburn and use of sun beds, than on screening.

clinically suspicious lesions, which for melanoma ranged from 1.1% to 19.4% (5). In Norway, as in Sweden (4), the number of diagnosed keratinocyte skin cancers was higher than for melanoma, but these cancer forms, particularly basal cell carcinomas, have generally a good prognosis.

Our data, as well as anecdotal feedback from dermatologists, indicate that a substantial proportion of those screened were not at increased risk of melanoma nor had a truly suspicious skin lesion, mirroring reported challenges of similar campaigns in other countries (1, 4).

Mass screening for detecting cutaneous melanoma is not recommended, as the evidence of any significant effect on mortality is lacking (6). Randomized control trials of the effect of screening for melanoma are difficult to set up (7). Targeted screening of persons with a high risk of melanoma requires methods to identify and recruit such individuals (6). Intensified screening efforts may result in overdiagnosis, i.e. diagnosing lesions that would not have any impact on the person's life or life expectancy if it had not been diagnosed and removed (6, 8). We therefore regard the Euromelanoma campaign as an awareness campaign supported by skin examination events, and not as a screening campaign.

We believe that campaigns to prevent melanoma and other forms of skin cancer should focus more on the need for more healthy sun habits, particularly avoiding sunburn and use of sun beds, than on screening. Also, information on self-examination of pigmented skin lesions and early signs of melanoma, i.e. the appearance of one pigmented skin lesion that is different from all others ("the ugly duckling-sign"), and

any change in colour, size and/or shape of an existing mole, should be highlighted. An annual campaign, with or without organised skin examinations, to attract attention from mass media and the general public is an excellent opportunity for dermatologists to promote this message.

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Epidemiology, Diagnostics and Treatment of Non-melanoma Skin Cancers

OSCAR ZAAR, MD

Department of Dermatology and Venereology Institute of Clinical Sciences Sahlgrenska Academy, University of Gothenburg, Göteborg, Sweden. E-mail: oscar.zaar@vgregion.se

Oscar Zaar, defended his doctoral thesis on March 22, 2018 at the Department of Dermatology and Venereology Institute of Clinical Sciences Sahlgrenska Academy, University of Gothenburg. Opponent was Gregor Jemec, Department of Dermatology, Roskilde Hospital, Health Science Faculty, University of Copenhagen, Roskilde, Denmark and Supervisor was John Paoli, Department of Dermatology and Venereology Institute of Clinical Sciences, Gothenburg, Sweden. The thesis is available at: https://gupea.ub.gu.se/handle/2077/54538.

Skin cancer, including malignant melanoma and non-melanoma skin cancer (NMSC), is a growing problem due to the increasing incidence in Sweden and in other Caucasian populations. NMSCs are diagnosed as often as all other cancers combined and include basal cell carcinoma (BCC), squamous cell carcinoma (SCC), precursors to SCC such as Bowen's disease (BD) and actinic keratosis (AK), as well as several rare skin cancers including Merkel cell carcinoma (MCC). The purpose of this thesis was to investigate novel aspects within the fields of epidemiology, diagnosis and treatment of NMSCs.

In study I, the incidence and clinical characteristics of Swedish patients with MCC was explored. During the study period from 1993 to 2012, the age standardised incidence of MCC almost doubled with an increase of 73–85% depending on the population used for age standardisation. The overall incidence for women and men per 100,000 persons, using the world population for age standardisation, rose from 0.11 to 0.19 between 1993 and 2012.

In study II, the effectiveness of photodynamic therapy (PDT) for the treatment of BD was evaluated retrospectively for 423 lesions in 335 patients. The study showed that PDT was a relatively effective treatment with a complete clearance rate of 63.4% after a median follow-up time of 11.2 months. BD lesions > 20 mm in size and a single session of PDT were factors associated with statistically worse outcome.

In study III, a novel irradiation protocol in PDT for multiple AKs using a stepwise increase of light intensity, staying below $50 \, \mathrm{mW/cm^2}$ during the whole treatment session, was compared to the conventional irradiation protocol to assess pain levels during treatment and effectiveness. Both protocols had the same total light dose of $37 \, \mathrm{J/cm^2}$. The novel treatment protocol led to a small but statically significant decrease in pain (D 1.1 points on a visual analogue scale, p < 0.01). However, the clearance rate with the new protocol was slightly but significantly lower than that of the conventional protocol (91.2% vs. 93.7%, respectively) (p = 0.04).



Fig. 1. Gregor Jemec (Opponent), Oscar Zaar and John Paoli (Supervisor).

In study IV, the chemical composition of lipids in BCCs was mapped using Time-of-Flight-Secondary-Ion-Mass-Spectrometry (ToF-SIMS). ToF-SIMS was able to identify different lipids in healthy and cancerous tissue. Furthermore, sphingomyelin lipids were found in aggressive BCCs whereas phosphatidylcholine lipids were observed in less aggressive tumours.

In conclusion, the incidence of MCC has increased the last 20 years, PDT is a relatively effective treatment modality in BD, novel illumination protocols with lower light intensity can decrease pain in PDT and ToF-SIMS can be used to identify the lipid composition of BCCs.

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The Roles of MicroRNAs in Skin Wound Healing

Xı Lı

Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden. E-mail: xi.li@ki.se

Xi Li defended her PhD thesis on February 8, 2019 at Karolinska Institutet, Stockholm, Sweden. The opponent was Professor Marjana Tomic-Canic, from Department of Dermatology and Cutaneous Surgery, University of Miami, USA and Principal supervisor was Ning Xu Landén, Department of Medicine Solna, Unit of Dermatology and Venereology, Karolinska Institutet, Stockholm, Sweden. The dissertation is available at: https://openarchive.ki.se/xmlui/handle/10616/46604

Skin is an essential biological barrier of the human body, and wound healing is the fundamental physiological process to keep its integrity. Chronic non-healing wounds are growing socioeconomic and health concerns, which longs for more understanding of their pathophysiology to discover effective treatments. In this thesis, we focused on how microRNAs (miR) work together with their target protein-coding genes to regulate the complex wound healing process, and by exploring the roles they play in chronic wounds we aimed to discover potential therapeutic targets.

In paper I, a distinct up-regulation of miR-31 in human acute wounds was identified from profiling analysis. We discovered miR-31 as a pivotal regulator in promoting keratinocyte proliferation and migration by targeting EMP1 during wound healing, emphasizing its importance in re-epithelialization.

In paper II, miR-34 family, as a famous tumour suppressor, popped out amidst the top upregulated miRs in venous ulcer. *In vitro*, miR-34a and miR-34c enhanced inflammatory response of epidermal keratinocytes via targeting LGR4 and positively regulating NF-κB signalling pathway. *In vivo*, mouse model of either miR-34 local overexpression or Lgr4

knockout displayed impaired wound healing with excessive inflammation and suppressed cell growth. These suggest that miR-34 plays a pathological role in chronic wounds by contributing to the excessive inflammation.

In paper III, in continuity with our previous report that miR-132 displays anti-inflammatory and pro-proliferative roles in keratinocytes, we studied the function of miR-132 in another major skin resident cell type fibroblasts. By both overexpression and inhibition, miR-132 was proved to facilitate migration of primary human dermal fibroblasts,

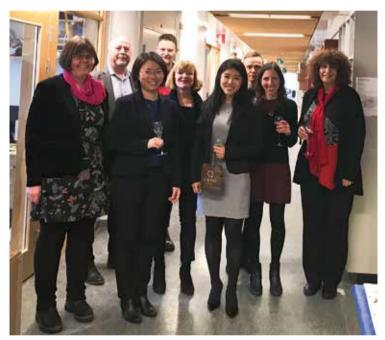


Fig. 1. From left: Lena Eliasson (examination board), Gunnar Kratz (examination board), Ning Xu Landén (principal supervisor), Ole E Sørensen (examination board), Mona Ståhle (co-supervisor), Xi Li (defendent), Andor Pivarcsi (co-supervisor), Enikö Sonkoly (Co-supervisor) and Marjana Tomic-Canic (Opponent).

through targeting RASA1 and regulating Ras signalling. Since fibroblasts derived from chronic wounds are non-migratory, our study suggests the miR-132-RASA1-Ras axis with potential therapeutic impact.

In paper IV, we tested the therapeutic potential of miRs, taken miR-132 as an example. A significant downregulation of miR-132 was revealed in diabetic foot ulcer. Intradermal injection of liposome-encapsulated miR-132 mimics effectively accelerated wound healing. Moreover, *ex vivo* human model exhibited ameliorated re-epithelialization upon miR-132 topical application, denoting that local treatment of miR-132 deserves

further evaluation in a clinical trial as a potential target for treating chronic wounds.

Conclusively, this thesis investigated the crucial functions of miR-31, miR-34 and miR-132 in different phases of normal skin wound healing process and in chronic wounds, and pointed out a promising potential of microRNA-based therapy in treating chronic wounds.

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Surgical Site Infections in Dermatologic Surgery – Clinical, Diagnostic, and Pathogenic Aspects

KARIM SALEH, MD, PHD

Faculty of Medicine, Lund University, Lund, Sweden. E-mail: karim.saleh@med.lu.se

Karim Saleh, defended his doctoral thesis on February 1, 2019 at the Faculty of Medicine, Lund University, Sweden. Opponent was Professor Eduardo Nagore, Instituto Valenciano de Oncologia, Spain, main supervisor was Professor Artur Schmidtchen and co-supervisor was Andreas Sonesson, Faculty of Medicine, Lund University, Sweden. This thesis is available at: https://portal.research.lu.se/portal/files/56861081/Karim_Saleh. Doctoral.thesis.no_studies_attached.pdf.

Surgical site infections (SSIs) in dermatologic surgery contribute to unwanted healthcare costs and are complications that cause suffering in patients. The aim of this thesis was to explore clinical, diagnostic, and pathogenic aspects of SSIs in dermatologic surgery.

In study I, we examined bacterial dynamics during normal wound healing and SSIs. We found that quantifying bacteria from wounds was a relevant factor for assessing healing outcomes. Higher bacterial loads in wounds resulted in complicated postoperative healing outcomes.

In study II, we designed a randomized controlled trial exploring the effects of a

novel antiseptic, polyhexanide biguanide (PHMB) on bacterial loads. PHMB added to tie-over dressings in full-thickness skin grafting did not decrease bacterial loads and paradoxically increased the incidence of SSIs in the intervention group.

In study III, we examined whether wound fluids obtained from dermatosurgical wounds could predict the occurrence of an SSI. Our results showed that the investigated biomarkers could indeed serve as diagnostics for assessing wound healing.

In study IV, the aim of the study was to assess inter-observer agreement when assessing wound healing in dermatologic surgery. There was a broad inter-observer variability in the diagnosis of an SSI illustrating the need for objective diagnostic methods that capture an actual SSI.



Fig. 1. From left to right: Associate professor Kari Nielsen (chair and member of the review committee), Dr. Andreas Sonesson (Co-supervisor), Professor Artur Schmidtchen (Main supervisor), Dr. Karim Saleh, Professor Eduardo Nagore (Opponent), Professor Tautgirdas Ruzgas (review committee), and associate Professor Adam Linder (review committee).

Ultimately, we provided new insights into SSIs in dermatologic surgery that can be useful in discovering methods to prevent these types of infections in the future.

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Subtle Clues in Hidradenitis Suppurativa Diagnosis

DORRA BOUAZZI, DITTE M. L. SAUNTE AND GREGOR B. E. JEMEC

Department of Dermatology, Zealand University Hospital, Roskilde Hospital; Health Sciences Faculty, University of Copenhagen, Denmark. E-mail: dob@regionsjaelland.dk

Idradenitis suppurativa (HS) is an inflammatory disorder of the apocrine gland-bearing regions of the skin, which presents with recurrent painful nodules and suppuration. The primary nodules may develop into abscesses and tunnels (sinus tracts) and scarring (1). Patients often go years without a diagnosis, resulting in repeated courses of ineffective medical treatments, such as dicloxacillin, and surgical procedures, such as attempted incision and drainage. It may be speculated that, despite clear clinical diagnostic criteria for HS, for some less-experienced doctors, differential diagnosis may still not be well-established.

When diagnosing HS it is sometimes important to look for subtle clues in the form of typical morphological manifestations (2), some of which are described in the clinical cases below.

OBSERVATIONS

Case 1

A 22-year-old woman presented to the Department of Dermatology, Zealand University Hospital, Roskilde with a painful erythematous fluctuating abscess >2 cm on her left buttock (Fig. 1). A thorough examination revealed a red inflamed nodule (<1 cm) in the axilla (Fig. 2). A closer look at the surrounding skin in the axilla revealed other important findings

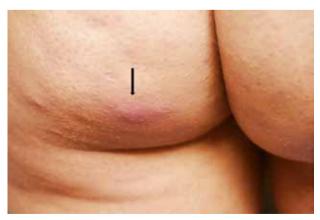


Fig. 1. Case 1: Erythematous abscess on left buttock (arrow).









Fig. 2. Case 1: Lesion in the right axilla with scars and tombstone comedones (arrows).

that helped to make the clinical diagnosis of HS, namely the presence of tombstone (pseudo) comedones. This is a morphological manifestation of HS that may help to differentiate between a simple abscess and HS.

This distinction is important, as an incision and drainage procedure would probably have been performed if an infectious abscess was suspected, but due to the findings in the axilla that showed clear morphological manifestations of HS (i.e. tombstone comedones) and an inflamed nodule, treatment with intralesional triamcinolone was chosen to reduce local inflammation. In the absence of soft fluctuation, incision and drainage would have been inappropriate due to its low efficacy and high recurrence rate (3).

In addition, the patient stated that both her father and brother had a history of recurrent boils. It is therefore noteworthy to emphasize the importance of asking about the patient's family history and to look for HS-specific clues (also to examine other anatomical regions).

Case 2

A woman consulted the Department of Dermatology, Zealand University Hospital, Roskilde due to a nodule in the groin (Fig. 3). The patient reported purulent discharge and pain.



Fig. 3. Case 2: Deep-red nodule (green arrow) with nearly placed scars (red arrows) in the groin.

Examination revealed a red inflamed nodule, together with another important clinical sign of HS, namely scars. Scars close to the lesion illustrate that the patient has had previous similar eruptions. Since HS is a chronic disease, scars are an important clue when diagnosing HS.

Discussion

It is sometimes difficult to differentiate between HS nodules/ abscess and bacterial abscesses. The following clues may help the clinician to strengthen the suspicion of HS: (*i*) morphological manifestations (i.e. tombstone comedones and scars close to the lesion); (*ii*) chronicity (or recurrence) of the eruptions (nodules, abscess or tunnels); (*iii*) multiple eruptions in the intertriginous skin areas (groin, axilla, buttocks, mamma, etc.); and (*iv*) family history of HS.

Conclusion

Occasionally the diagnosis of HS is not obvious, but relies on more subtle clues, as presented in the clinical cases described here. It is important that clinicians develop the skill to differentiate between HS and infectious abscesses, and thereby avoid HS patients having to undergo unnecessary procedures, which may be both physically difficult and emotionally exhausting.

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Black Hairy Tongue (Lingua villosa nigra)

CARSTEN SAUER MIKKELSEN¹, KARIANNE RØMER-MECHLENBORG², PETER BJERRING³ AND LUIT PENNINGA⁴

¹Specialist in Dermatovenereology, and ²Sygeplejerske, Tolstrupvej 91, DK-9700 Broenderslev, ³Specialist in Dermatovenereology. Professor, Molholm Private Hospital and Bispebjerg Hospital, Copenhapen, Denmark, and ⁴Specialist in Surgery, Ilulissat Hospital Avannaa Region, Ilulissat, Greenland. E-mail: c.s.mikkelsen@hotmail.com

CASE

A 36-year-old otherwise healthy man came to the clinic complaining about bad breath, a tickling sensation on the tongue and altered taste buds. He had an excessive intake of alcohol (minimum 8 units daily), tobacco (40 cigarettes daily) and coffee (12 cups daily).

He presented with a history of 6 weeks with black discoloration of his tongue. He denied new medication or use of mouthwash containing hydrogen peroxide. His tongue was tested negative for pathogenic bacteria and fungal infections.

The patient had poor oral hygiene. He was diagnosed with "black hairy tongue" (BHT) and after minimizing his intake of alcohol, tobacco and coffee and brushing his teeth and tongue twice daily the condition resolved.

Discussion

BHT occurs in about 0.5% of adults (1). However, the prevalence is variable depending on the population studied (2).

The distinct dark, furry appearance usually results from a build-up of dead skin cells on the many tiny papillae on the surface of the tongue containing taste buds. These papillae, which are longer than normal, can easily trap and be stained by bacteria, yeast, tobacco, food or other substances (2). The hairy tongue is often black, but can also appear brown, yellow, green and a variety of other colours.



 $\it Fig.~1$. Black hairy tongue before and after treatment. Photo: Carsten Sauer Mikkelsen

Predisposing factors include excessive intake of alcohol and smoking, xerostomia (dry mouth), soft diet, poor oral hygiene and certain medications (2). Medications commonly associated with BHT are bismuth, antibiotics and medications that have xerostomia as a side-effect, for example antipsychotics (3).

Management is by improving oral hygiene, especially scraping or brushing the tongue (2). In addition, discontinuation of alcohol, smoking and a soft diet is advised (3).

Global variation in the prevalence of black hairy tongue occurs due to differences in diet, oral hygiene habits, and oral flora (3). The condition is more common in males and in the elderly. This may be associated with a higher smoking rate and poorer oral hygiene in these groups. Although more common in elderly the condition can occur in people of all ages, and the condition has even been reported in a 2-month-old infant (4).

Differential diagnosis includes pseudo-BHT secondary to chemicals or food colouring, pigmented fungiform papillae of the tongue, hairy leukoplakia, Addison disease, Peutz-Jeghers syndrome, Laugier-Hunziker syndrome, amalgam tattoo, lichen planus pigmentosus and congenital naevi.

BHT represents a relatively uncommon condition, causing great concerns in affected individuals, due to its clinical presentation. BHT is a benign condition, but people who are affected may be distressed at the appearance and possible halitosis and burning mouth, and therefore treatment is indicated (1).

The authors have no conflicts of interest to declare.

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Kawasaki Disease: Two Episodes of Recurrent Disease in a Greenlandic Inuit Boy

Luit Penninga¹, Anne Kathrine Lorentzen¹ and Carsten Sauer Mikkelsen²

¹Ilulissat Hospital, Ilulissat, Avannaa Region, Ilulissat Hospital, Postbox 514, 3952 Ilulissat, Greenland, and ²Clinic in Dermatology, Brønderslev, Denmark. E-mail: LP@ctu.dk

Awasaki disease is a vasculitis of medium-sized arteries presenting with mucocutaneous manifestations and lymphadenopathy (1, 2). Kawasaki's syndrome typically occurs in childhood, and is commonly confused with infectious exanthemas (3). This case report outlines the characteristics of the condition.

Patients typically present with fever and erythema of the lips and oral mucosa, rash, and changes in the extremities, including erythema of the palms and soles, bilateral non-exudative conjunctivitis and cervical lymphadenopathy. These classical features normally develop after a short course of respiratory or gastrointestinal symptoms (1).

Normally, Kawasaki disease is self-limiting (3). Often the fever and mucocutaneous manifestations resolve within 10–12 days without treatment (4). The major problem of the disease is the occurrence of cardiovascular complications, which may cause significant morbidity and mortality (5). Patients can develop aneurysms of the coronary arteries, reduced contractility of the myocardium, heart failure, cardiac arrhythmias, and occlusion of peripheral arteries (5).

Recurrence of Kawasaki disease with new episodes of fever, mucocutaneous manifestations and lymphadenopathy is rare (6, 7). We report here an Inuit boy in Greenland who experienced two episodes of Kawasaki disease.

CASE REPORT

A 10-month-old Greenlandic Inuit boy was admitted to the local hospital. He had been coughing and spiking fevers for a few days. Due to pulmonary crepitations he was started on oral antibiotics. The fever persisted, and he developed the classical erythema of the lips and oral mucosa (Fig. 1), rash, palm and sole erythema, bilateral non-exudative conjunctivitis (Figs 2 and 3) and cervical lymphadenopathy. He was treated with intravenous (IV) immunoglobulins and recovered. Echocardiography was performed and slight dilatation of the coronary arteries was seen. He started treatment with acetylsalicylic acid. After 2 months he was re-admitted with fever, general malaise, and had recurrence of all the classic symptoms of Kawasaki disease; erythema of the lips and oral mucosa, rash, changes



Fig. 1. Erythema of the lips and oral mucosa.



Fig. 2. Non-exudative conjunctivitis.



Fig. 3. Erythema of the lips and oral mucosa, slight rash, and bilateral non-exudative conjunctivitis.

in the extremities, bilateral non-exudative conjunctivitis and cervical lymphadenopathy. The same day he was treated with IV immunoglobulins, and shortly afterwards, all symptoms had disappeared. As recurrence of Kawasaki disease is rare, he was tested for immunological defects and other genetic diseases, but none were found. After 5 months, a new episode with fever and the classic features of Kawasaki disease occurred. Once again treatment with IV immunoglobulins was given, and he recovered quickly. As this was the second episode of recurrent Kawasaki disease, he again underwent investigation for immunological diseases, but all tests again were negative. A repeat echocardiography showed normal myocardial function, and no progression of the coronary artery dilatation. At follow-up one year after the initial episodes of Kawasaki disease, no further episodes had occurred.

Discussion

Fever is common during childhood due to infectious diseases. However, fever due to systemic inflammation is also one of the main features of Kawasaki disease (1). Kawasaki disease should be considered in children who have unexplained fever for more than 5 days (8).

Kawasaki disease can be diagnosed by the presence of typical clinical manifestations. A polymorphous rash is seen in 70–

90% of cases (4). Oral mucous membrane symptoms in 90%, symptoms in the extremities in 50–85%, ocular symptoms in more than 75%, and cervical lymphadenopathy in 25–70% (1). This means that not all symptoms and clinical manifestations occur in all patients with Kawasaki disease; symptoms do not always come in the same order, and are not always present at the same time. Due to the very high occurrence of cutaneous rash and oral mucous symptoms, dermatologists are frequently consulted (3, 4).

The rash often appears in the early phase of the disease, typically as erythema in the region of the perineum, and desquamation. This is followed by morbilliform, targetoid or macular skin lesions on the torso and extremities (3). Kawasaki disease may initiate a psoriasiform eruption in children not previously diagnosed with psoriasis. Vesicles and bullae are normally not seen with Kawasaki disease. Patients may have redness and crust formation at the site of the Bacille Calmette Guerin (BCG) vaccination (3, 4). This is, of course, only relevant in countries, such as Greenland, where BCG vaccination is part of the childhood immunization programme.

Changes on the extremities occur in the final phase of the disease. Symptoms include indurated oedema on the dorsal side of the hands and feet, and diffuse erythema of the palms and soles. Recovery from Kawasaki disease is associated in 68–98% of children with sheet-like desquamation of the periungual hand and feet regions. Furthermore, linear nail creases occur, also called Beau's lines (1).

Oral mucous membrane symptoms include red, cracked lips and a strawberry tongue. The strawberry tongue is caused by sloughing of filiform papillae and denuding of the inflamed glossal tissue. Often these symptoms become more evident as Kawasaki disease progresses. Discrete oral lesions, such as ulcers, vesicles, or tonsillar exudate, are suggestive of conditions other than Kawasaki disease (1).

Arthritis is not part of the diagnostic criteria of Kawasaki disease, but occurs with either oligoarticular or polyarticular involvement in 7–25% of cases (1).

Cardiovascular symptoms and complications of Kawasaki disease, although not part of the diagnostic criteria, may cause severe morbidity and mortality. At the time of diagnosis, 30% of patients have dilatation of the coronary arteries.

It is important to highlight that there is no single laboratory test that can confirm or deny the diagnosis of Kawasaki disease. Kawasaki disease causes systemic inflammation, and increases in C-reactive protein and erythrocyte sedimentation rates are frequently seen, as well leukocytosis and thrombocytosis (2).

The aetiology of Kawasaki disease is unknown (9). It is thought to be caused by an overreaction of the immune system following a mild infection (1). The disease is more common in Asian people, and the incidence of Kawasaki disease is 8–10 times higher in Japan compared with Northern America (6, 7, 9). The incidence of Kawasaki disease among Inuits is unknown.

Recurrence of Kawasaki disease is rare and occurs in only 1–4% of cases (6, 7, 10–12). An incomplete immune response is thought to be the primary reason for recurrence of Kawasaki disease (6, 11). In the current case, the patient experienced two episodes of recurrent disease, which is extremely rare. In all 3 episodes, the patient presented with a rash, oral mucocutaneous symptoms, bilateral conjunctivitis and cervical lymphadenopathy. Hence, the diagnosis of Kawasaki disease is very likely. Due to the frequent recurrences, the patient was tested for immunological disease and genetic defects, but none were found.

Treatment of Kawasaki disease consists of administration of intravenous immunoglobulins (5). Immunoglobulins reduce the incidence of cardiovascular complications and coronary aneurysms five-fold when given within the first 10 days of disease, compared with no administration of immunoglobulins (5). Hence, early diagnosis is important to allow for early treatment and reduction of cardiovascular complications.

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LEO

An Annular Shaped Rash in an Infant: A Quiz

GEORG AUTHRIED¹ AND MATHIAS TIEDEMANN SVENDSEN²

¹Landesklinikum Amstetten, Krankenhausstrasse 21, AT-3300 Amstetten, Austria, and ²Department of Dermatology and Allergy Centre, Odense University Hospital & Institute of Clinical Research, University of Southern Denmark, Odense, Denmark. E-mail: georg.authried@amstetten.lknoe.at





A 2-year-old boy was referred to the paediatric ward because of an itchy annular rash on the trunk and extremities. Up to referral he had been suffering from a streptococcal tonsillitis, which had been treated with Cefoxitin, 30 mg/kg body weight a day for 7 days.



Fig. 1. Back of a 2-year-old boy. Notice the annular shaped rash with central pallor. The skin condition was associated with angioedema of the feet.

At the admission, there was noted an annular, generalized rash with central pallor (Figs. 1 and 2) and a discrete oedema of the feet, which had resulted in walking impairment for one day. He was afebrile and the capillary C-reactive protein was 1.74 mg/dl (normal range < 0.5 mg/dl).

What is the diagnosis? See next page for answer-



Fig. 2. Abdominal area of a 2-year old boy. Wide-spread annular shaped rash with central pallor.

AN ANNULAR SHAPED RASH IN AN INFANT: A COMMENTARY

Diagnosis: Urticaria multiforme

Urticaria is a common condition in infants (1, 2), most often triggered by viral or bacterial infections (3). Urticaria multiforme, also known as annular urticaria, is a subtype of urticaria that mainly affects infants.

It is often confused with erythema multiforme but self-limiting, and there is a great treatment success when antihistamines are prescribed (1–5). It is a clinical diagnosis and a skin biopsy is not needed.

The boy was treated with desloratidine oral solution (0.5 mg/ml) 1.25 mg once daily with excellent treatment outcome; 2

days after initiated treatment the wheals had faded, the angioedema resolved and the boy regained his walking ability.

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A Bluish Nodular Lesion: A Quiz

Shailajah Kamaleswaran and Anette Bygum
Department of Dermatology and Allergy Centre, Odense University Hospital,
DK-5000 Odense C, Denmark. E-mail: shailajah.kamaleswaran@rsyd.dk





A 13-year-old girl and her little sister were born with bluish nodular cutaneous vascular lesions, respectively, on lower back and thigh (Fig. 1). The lesions became more visible as they got older and a few new lesions developed over time. No mucosal lesions were found. Recently the lesions became tender by touch, why a dermatologist was consulted. It was revealed, that the father and grandfather of the girls had similar lesions.

What is the likely diagnosis?



Fig. 1. Bluish nodular cutaneous vascular lesions.

A Bluish Nodular Lesion: A Commentary

Diagnosis: Glomuvenous malformations

The skin biopsy showed Glomuvenous malformation (GVM) and the gene-analyse confirmed mutation in glomulin-gene (*GLMN*).

GVM is a benign and rare venous malformation, which can involve the skin, subcutis and seldom mucosa, but never gastrointestinal tract (1, 2). Clinically GVMs are characterized by raised bluish purple vascular lesions with a cobblestone like appearance. Less frequent is the plaque-like type of GVM. GVM is often present at birth and increases in size slowly during childhood. Over the time new lesions can develop. The lesions may be painful on palpation, therefore elastic stocking is not recommended for GVMs (2).

Histologically GVMs are characterized by mural glomus cells in dilated venous channels. GVM is caused by a mutation in the gene encoding glomulin. The inheritance pattern is autosomal dominant with incomplete penetrance. Treatment options are surgical excision and laser therapy (2, 3).

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UEMS-EBDV Board Examination 2019

GENERAL INFORMATION

The UEMS European Board of Dermatovenereology Diploma (EBDVD) Examination is a test of excellence in Dermatology and Venereology. It is designed to assess the knowledge and clinical skills requisite to the delivery of a high standard of dermato-venereological care both in hospitals and in independent clinical practices.

The EBDVD Examination is the responsibility of the UEMS European Board of Dermatovenereology (UEMS-EBDV). The first examination was held in August 2007 in Frankfurt am Main, Germany. Thereafter, the examination has taken place in Frankfurt every year. Since the year 2016 has been installed computer-based online examination in cooperation with Orzone AB, Gothenburg, Sweden.

There are usually candidates from all over Europe and other countries outside the Europe. The EBDVD Examination in most countries of the European Union is voluntary. However, many countries in the Europe recognizes this examination as conforming to their own National Specialist Examinations.

UEMS Training Requirements for the Specialty of Dermatology and Venereology is found here: https://www.uems-ebdv.org/web/index.php/uems-board-examination

DATES

The European Board of Dermatovenereology Diploma Examination will be held on 2^{nd} – 3^{rd} August, 2019. Deadline for application is May 15, 2019.

VENUE

Lecture Halls of the campus at the University Hospital Frankfurt

EBDVD EXAMINATION FEE

- 550 EUR for candidates from the European Union Member State or the signatory country of the European Economic Area Agreement and the Switzerland
- 750 EUR for candidates from other countries

Förkortad produktresumé

Förkortad produktresumé för Enstilar® (kalcipotriol/betametasondipropionat)

Enstilar® (kalcipotriol 50 μg/g och betametasondipropionat 0,5 mg/g), kutant skum. Medel mot psoriasis, ATC-kod: D05AX52. Indikationer: Lokal behandling av psoriasis vulgaris hos vuxna. Dosering och administreringssätt: Enstilar® skum bör appliceras på det drabbade området en gång per dag. Den rekommenderade behandlingstiden är 4 veckor. Den maximala dagliga dosen av Enstilar® bör inte överskrida 15 g, dvs. en 60 g behållare bör räcka i minst 4 dagar. 15 g motsvarar mängden som administreras från behållaren om sprayknappen hålls helt nedtryckt i ungefär en minut. Två sekunders sprayning ger ungefär 0.5 g. Som ett riktmärke bör 0,5 g skum täcka ett område på huden motsvarande ungefär ytan av en vuxens hand. Vid användning av andra topikala produkter innehållande kalcipotriol, förutom Enstilar®, bör den totala dosen av alla produkter innehållande kalcipotriol inte överstiga 15 g per dag. Den totala kroppsytan som behandlas bör inte överskrida 30%. För kutan användning. Skaka behållaren under ett par sekunder före användning. Enstilar® skall appliceras genom att spraya på ett avstånd av minst 3 cm från huden. Under sprayning kan behållaren hållas i vilket läge som helst utom horisontellt. Enstilar® sprayas direkt på varje drabbat hudområde och smörjs in försiktigt. Händerna sk a tvättas efter användning av Enstilar® (såvida Enstilar® inte används för att behandla händerna), för att undvika oavsiktlig överföring till andra delar av kroppen. Användning under täckande förband ska undvikas eftersom det ökar den systemiska absorptionen av kortikosteroider. Det rekommenderas att inte duscha eller bada omedelbart efter applicering av Enstilar®. Pediatriska patienter: Säkerheten och effekten av Enstilar® skum vid behandling av barn under 18 år har inte fastställts. Inga data finns tillgängliga. Kontraindikationer: Överkänslighet mot de aktiva substanserna eller mot något hjälpämne. Enstilar® är kontraindicerat vid erytrodermisk och pustulös psoriasis. Patienter med kända störningar i kalciummetabolismen. Vid viruslesioner i huden (t.ex. herpes eller varicella), svamp- eller bakterieinfektioner i huden, infektioner orsakade av parasiter, hudmanifestationer i samband med tuberkulos, perioral dermatit, hudatrofi, atrofisk striae, kapillärskörhet, iktyos, acne vulgaris, acne rosacea, rosacea, sår och skador. Varningar och försiktighet: Hämning av binjurebarkfunktionen eller försämrad glykemisk kontroll av diabetes mellitus kan även inträffa vid topikal kortikosteroidbehandling beroende på systemisk absorption. Användning under täckande förband ska undvikas. Synrubbning kan rapporteras. Vid dimsyn eller synrubbning bör man överväga remiss till oftalmolog för utredning. Applicering på stora ytor skadad hud, på slemhinnor eller i hudveck bör undvikas. Hyperkalcemi kan förekomma men risken är minimal om den maximala dagliga dosen av Enstilar® (15 g) inte överskrids. Serumkalcium normaliseras när behandlingen avbryts. Enstilar® innehåller en potent grupp III steroid och samtidig behandling med andra steroider på samma behandlingsområde måste därför undvikas. Undvik kontakt med huden i ansiktet och underlivet. Patienter ska instrueras i korrekt användning av läkemedlet för att undvika applicering i, eller oavsiktlig överföring till, ansikte, mun och ögon. Händerna måste tvättas efter varje applicering för att undvika oavsiktlig överföring till de sa områden. Sekundärinfekterade lesioner bör behandlas med antimikrobiell terapi. Om infektionen förvärras, bör kortikosteroidbehandlingen avbrytas. Vic avs atande av psoriasisbehandling med topikala kortikosteroider kan det föreligga risk för rebound-effekt. Vid långtidsbehandling med kortikosteroid finns ökad . .sk för lokala och systemiska biverkningar. Läkare rekommenderas att råda patienten att under behandling med Enstilar® begränsa eller undvika överdriven exponering för naturligt eller konstgjort solljus. Enstilar® innehåller butylhydroxitoluen (E321) som ett hjälpamne. Särskilda förvaringsanvisningar: Förvaras vid högst 30°C. Försiktighetsåtgärder: Extremt brandfarlig aerosol. Tryckbehållare: kan explodera vid upphettning. Skyddas från solljus. Utsätt ej för temperaturer över 50°C. Får ej punkteras eller brännas, även efter användning. Spraya inte mot en öppen låga eller annan antändningskälla. Håll borta från gnistor, öppen eld och andra antändningskällor. Ingen rökning. Förpackningar: 60 g och 2x60 g. För fullständig produktinformation och priser se www.fass.se. Datum för översyn av produktresumén: 2018-11-23.

Referens till informationen: 1. Koo J et al. J Dermatolog Treat 2016; 27(2):120–127.

Förkortad produktresumé för Daivobet® salva

MCS-08418 2018-12-21

Daivobet® (kalcipotriol 50 μg/g + betametasondipropionat 0,5 mg/g), salva. Medel mot psoriasis. ATC-kod: D05AX52.

Indikation: Lokal behandling av stabil plackpsoriasis hos vuxna, där lokal terapi är lämplig. Doserings- och administreringssätt: Appliceras på det angripna området en gång dagligen. Rekommenderad behandlingstid är 4 veckor. Efter denna period kan upprepad behandling med Daivobet® ske enligt läkares bedömning. Kontraindikationer: Överkänslighet mot de aktiva substanserna eller mot något hjälpämne. Vid erytrodermisk, exfoliativ och pustulös psoriasis. Hos patienter med störningar i kalciummetabolismen. Vid virus-, svamp- eller bakterieinfektioner i huden, infektioner orsakade av parasiter, hudmanifestationer i samband med tuberkulos, perioral dermatit, hudatrofi, atrofisk striae, kapillärskörhet, iktyos, acne vulgaris, acne rosacea, rosacea, sår och skador. Varningar och försiktighet: Samtidig behandling med andra steroider måste undvikas. Behandling av mer än 30% av kroppsytan ska undvikas. Läkemedlet ska inte användas i ansiktet eller i underlivet. Användning under täckande förband ska undvikas. Synrubbning kan rapporteras. Vid dimsyn eller synrubbning bör man överväga remiss till oftalmolog för utredning. Sekundärinfekterade lesioner bör behandlas med antimikrobiell terapi och kortikosteroid-behandlingen bör avbrytas om infektionen förvärras. Begränsa eller undvik överdriven exponering för naturligt eller konstgjort solljus. Kalcipotriol skall endast användas tillsammans med UV-bestrålning om läkare och patient anser att det potentiella värdet av en sådan behandling uppväger eventuella risker. Förpackningar: 15, 30, 60 och 120 g. Eventuellt marknadsförs inte alla förpackningsstorlekar. För fullståndig produktinformation och priser se www.fass.se. Datum för översyn av produktresumén: 2018-11-23. MCS-08492 2018-12-02

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I FO



Continuing Medical Education

How is Your Skill to Diagnose a Skin Lesion by Dermoscopy?

KAARE WEISMANN, PROFESSOR, DR.MED.

E-mail: weisech@dadlnet.dk

Case 21: A 20-year-old woman with a brownish lesion on her right third toe



Case 22: A 25-year-old man with a dark-brown lesion on his right foot





What is your diagnosis?

- 1. Junctional naevus
- 2. Acrolentiginous melanoma
- 3. Haemorrhagic lesion

What is your diagnosis?

- 1. Malignant melanoma
- 2. Pigmented spindle cell naevus
- 3. Junctional naevus

Case 23: A 29-year-old woman with a red lesion on her left cheek

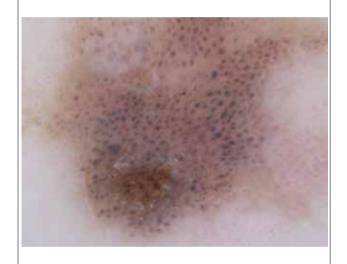


What is your diagnosis?

- 1. Eruptive haemangioma
- 2. Basal cell carcinoma
- 3. Benign lichenoid keratosis

Case 24: A 62-year-old woman with a brown lesion on her second right finger





What is your diagnosis?

- 1. Mb. Bowen
- 2. Basal cell carcinoma
- 3. Melanocytic naevus

Find the answers on bottom of page 36.



SAVE THE DATE!

Acta Dermato-Venereologica will celebrate its 100-year anniversary with a symposium $\it Date : 15^{\rm th} \ May \ 2020$

Place: Swedish Society of Medicine, Stockholm, Sweden

Frontiers in Dermatology and Venereology

1	rionitiers in Definatology and venereology
Programme:	
Chairperson: C	Olle Larkö
9.00-10.30	"ActaDV 100 year; an historic perspective", Anders Vahlquist
	"Skin fragility and blistering diseases", Leena Bruckner-Tuderman "Is permanent cure for genodermatoses in sight?", Jouni Uitto
10.30-10.50	Intermission
11.50-12.00	"Psoriasis: News in pathogenesis and therapy", Jonathan Barker
	"At last – some real progress in atopic dermatitis", Hywel Williams
12.00-13.00	Lunch
Chairperson: A	anders Vahlquist
13.00-14.10	"Melanoma: News in epidemiology and therapy", Julia Newton-Bishop
	"Itch; scratching the surface is not enough", Gil Yosipovitch
14.10-14.30	Intermission
14.30-16.00	"Combatting skin infections: A priority not just in Africa", Roderick Hay

"The changing spectrum of STI in Europe", Angelika Stary
End of meeting "The promising future of ActaDV", Olle Larkö

Answers to CME on pages 34-35

Case 21: 1 Junctional naevus (parallel furrow pattern)

Case 22: 3 Junctional naevus (lattice-like pattern)

Case 23: 2 Basal cell carcinoma (arborizing, tortuous vessels, amber coloured crust)

Case 23: 1 Mb. Bowen (glomerular vascular pattern, brown globules, structureless area)