

# International Dermoscopy Society



## IN THIS ISSUE

### 1 CONGRESS HIGHLIGHTS

Over 530 participants from 44 Nations made this congress a success under all aspects. Besides the dense scientific program during the day, fun was not forgotten - thanks to the rock concert of the Los Globules Marrones, who made the evening to another congress highlight.

### 2 SUMMARY OF LECTURES

74 International Speakers highlighted the importance of dermoscopy and new developing techniques such as automated diagnosis and confocal microscopy in scientific research and clinical practice.

### 3 CASES OF THE ISSUE

IDS- Members are asked to send interesting and teaching cases for this section.

### 4 NEW DERMOSCOPY BOOKS

Update on recently released dermoscopy books and upcoming meetings

## The era of clinicoimaging diagnosis

The 2nd congress of the International Dermoscopy Society took successfully place in Barcelona from 12 to 14th November 2009. A number of more than 600 participants from 44 Nations and the high scientific value of all sessions made this congress an extraordinary event for the dermoscopy community.

As already emerged during the 1st IDS congress in Naples 3 years ago, there is a continuously growing interest in dermoscopy related to scientific research and to its practical application in the daily routine.

During this 2nd IDS congress dermoscopy it became evident that we moved away from clinico-pathologic diagnosis into the era of clinico-imaging diagnosis. The dermatoscope is nowadays used as the dermatologist stethoscope for the diagnosis of skin lesions in general, including tumors, inflammatory and infectious skin diseases and hair or scalp disorders.

Besides this, the increasing interest in new developing techniques (such as RCM) as complementary tools together with dermoscopy in both research and clinical setting have been highlighted.

During these three days plenary sessions, symposia and practical focal sessions took place, giving the participants the opportunity to

update on important issues of global interest and to focus on specific issues.

In memoriam to Paolo Carli, the IDS awards young researchers with the Paolo Carli Award. The winner of this years award was Alon Scope from Israel. The poster price for the best poster was given to Cliff Rosendahl, Australia for his work on the dermoscopic-histopathologic correlation of gray circles in lentigo maligna.

Despite the dense scientific day program, there was also great fun and dancing in the evening during the unforgettable live concert of the rock'n roll band "*Los Globules Marrones*".

For those of us, who were unable to participate at this three day event, we have summarized some of the congress highlights.



In the name of the IDS, I like to take also this opportunity to wish you a Merry Christmas and a Happy and Peaceful New Year 2010.

Yours,

- Iris Zalaudek-  
(Editor-in-chief )

## SUMMARY OF THE PLENARY LECTURES AND SYMPOSIA

### Past, present and future of dermoscopy.

**Peter H. Soyer**, started the congress with an excursus in the history of dermoscopy, from the beginning of dermoscopy era in 1980 in Vienna to our days, with the foundation of the International Dermoscopy Society in 2001. Dermoscopy traditionally referred to the early detection of melanoma although new fields have been added to classical dermoscopy, entodermoscopy for the diagnosis of skin infections, inflammoscopy for the diagnosis of inflammatory skin diseases, tricoscopy for hair and scalp disorders. One of the more recently conspicuous advance has been the rise of tele-dermoscopy, which has facilitated the world wide exchange of knowledge and expertise, and provides the ultimate platform for second opinion.

### Why dermoscopy is the standard of care in Germany?

**Andreas Blum** illustrated the widespread of dermoscopy use in Germany. German dermatology had an high input 20 years ago in the development of dermoscopy. Stolz and Kreusch developed practicable dermoscopes for the daily use, a high number of continuing medical education was the basis of the widespread use of dermoscopy, so that today more than 80% of the German dermatologists are using dermoscopy in the daily practice. Its use is paid by private but not by the government insurances. Also the use of digital dermoscopic follow up images of melanocytic benign tumors is established and often demanded. Using all techniques the malignant/benign ratio for skin tumors should be 1:5-10.

### Why dermoscopy is not the standard of care in US?

**Allan Halpern** discussed why dermoscopy has been slower to gain

a foothold in clinical practice in the US. Notable barriers to dermoscopy use included lack of training and a perceived lack of utility. A survey conducted in 2000 indicated that at that time 50.6% of academic dermatologists associated with US residency programs were using dermoscopy. They recently repeated the survey, and nowadays 84.3% of respondents report using dermoscopy, with an increase of 40% in ten years. Reasons for dermoscopy use were consistent over time, but the main reason for not using dermoscopy remains the lack of training opportunities, together with time pressure.

### Machine Vision in the 21st Century.

**Harold Rabinovitz** focused on the more recent literature and an FDA study on computer systems that aid in the diagnosis of melanoma.

### What's new in dermoscopy?

**Alfred Kopf** presented a series of selected publications on dermoscopy which appeared in the literature since the last IDS congress in Naples held in 2006, starting from "dermoscopic neologisms", that are additions to the standard dermoscopic verbiage which has gradually evolved over 20 years.

### What is the real impact of dermoscopy in the management of skin tumors?

Luc Thomas presented the partial results of a ten year survey analysing in which way the use of dermoscopy changed the management of skin tumors in the pigmented lesion clinic in Lyon

### My thoughts on dermoscopy

**Giuseppe Argenziano** under-lined that the dermatoscope represents nowadays the dermatologist stethoscope, as we are moving away from clinicopathologic diagnosis into an era of clinicoimaging

diagnosis. Dermoscopy reveals a new morphologic dimension of pigmented and non pigmented skin tumors and it also improves the recognition of a growing number of skin symptoms in the field of general dermatology. In the last few years 3 meta analysis and 2 randomized studies have definitely proven that dermo-scopy allows improving sensitivity for melanoma as compared to naked eye examination alone. Dermoscopy has to be considered as both a first level screening tool for skin cancer detection, and as a second level tool for the digital imaging follow up of patients with multiple skin lesions.

### Dermoscopy beyond primary morphology.

**Ash Marghoob** discussed about the components of the clinical examination used in the evaluation of a skin lesion. They include touch, patient derived anamnestic data, analytical reasoning, comparative recognition, differential recognition and pattern analysis. The human cognitive process integrates this clinical information with that obtained from the dermoscopy evaluation of the lesion then rendering a diagnosis.

### Infectious diseases.

**Iris Zalaudek** discussed how dermoscopy facilitates the in vivo diagnosis of various skin infections and infestations such as viral warts, molluscum contagiosum, tinea nigra, scabies, tungiasis and pediculosis. Dermoscopy connects the research fields of dermatologists and entomologists opening a new research field: entomodermoscopy.

### Inflammatory diseases.

**Renato Bakos** discussed dermoscopy patterns that can be seen in several common skin diseases, such psoriasis vulgaris, that usually presents dotted vessels, and lichen planus that presents characteristic whitish striae on dermoscopy. Dermoscopy can be helpful in solving quizzing cases, and can monitor treatment response.

### **Inflammatory conditions of the scalp.**

**Lidia Rudnicka** presented dermoscopy features of the most common inflammatory scalp diseases including seborrheic dermatitis, psoriasis, LED, lichen plano pilaris, and also pemphigus vulgaris and pemphigus foliaceus

### **Hair loss and hair dystrophy.**

**Antonella Tosti** showed dermoscopy features of hair loss and dystrophy. Dermoscopy findings include vascular pattern, follicular and perifollicular signs and hair shafts characteristics. (scrivi solo quale malattie).

### **Dermoscopy and molecular genetics.**

**Susana Puig** presented recent findings about the correlation between dermoscopic patterns and genetic background in some melanocytic tumors. The presence of MC1R red hair polymorphism has been associated with early melanomas that under dermoscopy show fewer colors or fewer features. To better understand the modifying effect in pigmentation and pigmented lesions of the co-existence in mutations in CDKN2A (main gene responsible of familial melanoma) and polymorphisms in the MC1R, a in vivo model in mice with grafts of bioengineered human skin has been developed.

Dermoscopy in albino patients may facilitate the early recognition of amelanotic melanoma. Finally, dermoscopy may improve the early recognition of tumours in some syndromes as Xeroderma Pigmentosum.

### **Dermoscopy as a window into neogenesis.**

**Ash Marghoob** Dermoscopy allows to observe not only the static in vivo morphology of lesions but also the longitudinal evaluation of dermoscopic structures over time. Because most dermoscopic structures have definite histological correlates, clinicians can evaluate and monitor nevi over time in

different patients cohorts and age groups deducing histological appearance of nevi without resorting to a skin biopsy. This bring to question the validity of the hypothesis that nevi evolve from junction to compound to intradermal nevi.

### **Three roots of melanoma - A hypothesis based on melanoma stem cell theory.**

**Iris Zalaudek** discussed about the hypothesis that lentigo maligna (LM), superficial spreading melanoma (SSM) and nodular melanoma (NM) derive from stem cells in the human hair follicle, the epidermis and the dermis respectively. This model provides new explanations for the differences between LM, SSM and NM.

### **Optical principles of dermoscopy, polarized vs non-polarized, contact vs non-contact.**

**Alon Scope** illustrated the optical differences between polarized and non polarized dermatoscopes, and discussed why the two methods are complementary.

### **Confocal correlation of dermoscopy structures.**

**Giovanni Pellacani** Reflectance mode confocal scanning laser microscopy (RCM) is a new tool for the non invasive study of the skin at a quasi-histopathologic resolution, giving rise to images corresponding to horizontal sections of the epidermis and superficial dermis. The employment of dermoscopy in combination with confocal microscopy of pigmented skin tumors enabled the exact correlation of single dermoscopic patterns with their cytological and architectural substrate.

### **Dermoscopy / Confocal integrated approach in the clinical management of skin tumors.**

**Josep Malvehy** illustrated which

are the main field of application of the integrated approach with dermoscopy and RCM, namely the early detection of lentigo maligna melanoma, and recurrences after treatment. The integrated approach have been also successfully applied for monitoring of non invasive treatments in patients with multiple skin tumors.

### **Multispectral digital imaging: Relevance of the clinical dermatologist.**

**Arthur Sober** presented the final phase 3 results for FDA Approval of the Melafind, a new tool in the clinical evaluation of patients for melanoma. The multispectral imaging units utilizes a computerized analysis algorithm for the automatic diagnosis of melanoma. The ultimate objective is an end-to-end, fully automated, diagnostic instrument with the capability of diagnosing pigmented skin lesions without the intervention and assistance from any expert dermatologist.

### **How is our brain learning dermoscopy?**

**Ash Marghoob** introduced this session about teaching dermoscopy, giving a lecture on how is our brain working when practicing dermoscopy. Pattern analysis (heuristic approach) is the usual approach of dermatologists with accumulated experience. When facing with a lesion that does not adhere to the established "pattern templates" we move back to the analytical analysis.

### **Dermoscopy in the world**

**James Gricknik**, US; **Henrik F. Lorentzen**; Europe; **Richard Johns** and **Peter Bourne**, Australia; **Masaru Tanaka**, Asia. Representatives of the 4 continents involved in dermoscopy illustrated various aspects of teaching and practicing dermoscopy in their own countries.

**Impact in clinical research.**

**Giuseppe Argenziano** The use of dermoscopy is spreading worldwide, about 4000 clinicians joined the IDS as regular members, from more than 110 different countries. Almost 1000 papers have been published between 2003 and 2007, and about 300 dermoscopy papers have been referenced in Pubmed just in 2008.

2008-2009" now recommend, with grade A evidence (body of evidence can be trusted to guide practice), that the use of dermoscopy improves diagnostic accuracy. Their recommendations states "training and utilization of dermoscopy is recommended or clinicians routinely examining pigmented skin lesions".

situations as the delimitation of margins or relapses in facial lentigo maligna, or the diagnosis and follow up of BCC treated with imiquimod or photodynamic therapy. As both imaging techniques have a limitation in depth, the complementation with ultrasonography is of special interest. New non invasive diagnostic tools are now developing, the real impact of each should be elucidated.

**Promotion and implementation of dermoscopy worldwide.**

**Ash Marghoob** The "Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand

**Integration of new evolving technology.**

**Susana Puig** made an incursion in the world of new non invasive technologies. Nowadays the integration of dermoscopy and RCM is used not only in research but also in clinical practice in many

**"LOS GLOBULOS MARRONES"****DERMOSCOPISTS' PLAYING ROCK'N ROLL**

The rock concert of the "Los Globulos Marrones" was another highlight of this congress, which was organized and managed by Josep Malvehy following the motto *panem et circenses*. More than 300 dermoscopists listened pure rock'n roll and danced until the early morning. If you are interested to know more, have a look at:  
<http://www.youtube.com/watch?v=ZfasjbrUQs>

Top images from left to right:

Luc Thomas (guitar),  
 Arduino Lopez (bass guitar),  
 Raffaele Lopez (piano),  
 Daniele Striano (voice,  
 guitar), Geppi Argenziano  
 (drums), Patrizio Sepe  
 (voice, guitar), Peter Bourne  
 (keyboard), Harald Kittler  
 (guitar)

# Case of the IDS Newsletter

Case provided by Elisabeth Gomez-Moyano, Spain



## WHAT IS YOUR DIAGNOSIS?

A man 50-year-old presented with a 4 cm large, well-demarcated, pink to brown, nodule on his right leg. The patient referred a history of slow enlargement during the past year. Based on the dermoscopic patterns, what is your diagnosis? The correct answer is given on page 5.

Tip: When evaluating non-pigmented skin tumors by dermoscopy, follow a stepwise algorithm (see below) assessing first vessels morphology, second the arrangement of vessels and third, the presence of additional criteria/clues.

1st step: vessels morpholoy	2nd step: vessels arrangement	3rd step: additional criteria	Diagnosis	Management
comma	regular	residual brown globules, hairs	CMN or dermal nevus	no action
dotted + comma	regular	brownish pigmentation	red Clark nevus	if similar neighboring nevi: FU if single lesion: excision
dotted	regular	reticular depigmentation; chrysalis structures; remnants of pigmentation	Spitz nevus or thin AHM	excision
dotted	string	white halo	CCA	no action
dotted + glomerular	clustered	white halo, surface scales	BD or IEC	excision
hairpin	regular	white halo; milia-like cysts; comedo-like openings	SK	no action
	radial or irregular	white halo; central keratin crust	SCC or KA	excision
arborizing	branched	blue-gray ovoid nests/globules/ dots/blotches	nodular-cystic BCC	excision
linear-irregular	peripheral	multiple erosions; brown-gray leaf-like or spoke wheel areas	superficial BCC	excision
	central or irregular	red homogeneous pigmentation	PG or nodular AHM	excision
linear irregular + dotted	central or irregular	chrysalis structures; remnants of white-pink-brown-gray pigmentation	thin or intermediate thick AHM	excision
linear irregular + hairpin or corkscrew or arborizing	central or irregular	multiple colors; milky red globules/areas	thick AHM or melanoma metastases	excision
crown	radial	white polylobular center	SH	no action

Abbreviations: CMN=congenital nevus; FU=follow up; AHM=amelanotic/hypomelanotic melanoma; CCA=clear cell acanthoma; BD=Bowens disease; IEC=intraepidermal carcinoma; SK=seborrheic keratosis; SCC=squamous cell carcinoma; KA=keratoacanthoma; BCC=basal cell carcinoma; PG=pyogenic granuloma; SH=sebaceous hyperplasia

## New dermoscopy books

### **Principios De Dermatoscopia:**



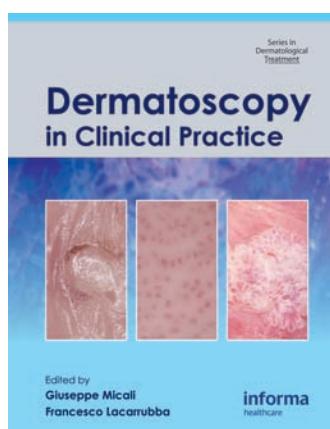
Edited by: Susana Puig and Joseph Malvehy.

The second new edition is written in Spanish and includes more than 700 hundred of clinical, histopathological and dermoscopic high quality images of contact non polarized dermoscopy and polarized dermoscopy perfectly identified all the book long. A chapter on principles of confocal microscopy is also included in the book. Unique schematics with patterns and structures are of major value for those beginners in the technique and also for advanced readers.

[www.dermoscop.com](http://www.dermoscop.com)

### **Dermatoscopy in Clinical Practice: Beyond Pigmented Lesions**

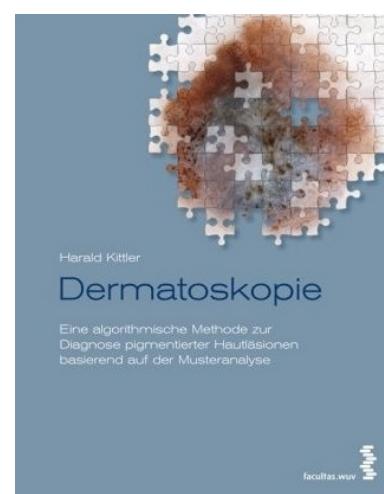
Edited by: Giuseppe Micali and Francesco Lacarrubba



This new book acts as an essential guide to the multiple uses of dermatoscopy and videodermatoscopy, discussing their role in diagnosis, prognostic evaluation and monitoring responses to treatment. Written by expert contributors internationally from academia as well as industry, this highly illustrated reference provides a balanced view of the potential of developments for you to benefit from. <http://catalogue.informahealthcare.com> The publisher promised a 20% for IDS members until 31st December 2009. For enquiries email harriet.jeckells@informa.com

### **Dermatoskopie: Eine algorithmische Methode zur Diagnose pigmentierter Hautläsionen basierend auf Musteranalyse**

Edited by: Harald Kittler



In this book the author describes a new algorithm based on the principles of pure pattern analysis, which follows a logic model and contains only simple, easy comprehensible, and clearly defined terminologies. The book contains many images and animates the reader to discover the morphologic variability of pigmented skin tumors by his/her own. Excellent dermoscopic-histopathologic correlations help in understanding the dermoscopic features. The book is available only in German. An illustrated introduction into the method in English can be found on [www.derm101.com](http://www.derm101.com)

### **CORRECT ANSWER TO THE IDS NEWSLETTER QUIZ CASE:**

#### **CLEAR CELL ACANTHOMA**

Although dotted vessels are generally highly predictive for melanocytic skin tumors including Spitz nevus and melanoma, this rule has one exception, which is clear cell acanthoma. The clue for the correct diagnosis of this variant of seborrheic keratosis is given by the specific string-like arrangement of the dotted vessels.

#### **Interested in submitting a quiz case for the IDS Newsletter?**

**Just send an email to:**  
iris.zalaudek@gmail.com

#### **NEWSLETTER:**

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Assistant Editor

**We like to invite you to visit our IDS discussion forum where you can post your own cases, comment on cases or simply watch the discussion on cases. This platform is open for all members of the IDS.**