TELEDERM 2008

2nd World Congress of Teledermatology

&

1st National Conference of
The Indian Society of Teledermatology

16-18 October 2008

Chennai, India

Theme: Healthy Present & Healthier Future

ABSTRACTS
Comprehensive approach to clinical, technical and administrative aspects of delivering remote dermatologic care.

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Teledermatology is an established tool for delivering specialty care. Remote monitoring of dermatologic conditions is increasing due to further lowering costs of digital cameras with excellent resolution and videoconferencing equipment, cheaper telecommunications line costs and widespread internet access. Practitioners of telemedicine in the dermatology community have created a body of research literature that is unsurpassed by any other specialty. These teledermatologists reported enhanced patient access to specialty care with decreased waiting time for consultation, good diagnostic reliability and high patient satisfaction with both store-and-forward and real-time telemmedicine. The American Academy of Dermatology Association provides information on standards that are applicable worldwide and also on credentialing, licensure and reimbursement that are unique to the U.S. The American Telemedicine Association Special Interest Group on Teledermatology developed “Guidelines and Best Practices,” a comprehensive approach to clinical, technical and administrative aspects of delivering remote dermatologic care.

A “hosted” model of Teledermatology: new technology with potential.

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The definition of telemedicine is the sharing of information remotely for the purposes of healthcare. In managing dermatological conditions the transfer of images using the current models of teledermatology and telemedicine are “real time” (synchronous) and “store and forward” (asynchronous) which have demonstrated limits of usability and safety.

The processes involved in diagnosing and managing dermatological conditions includes the full assessment of symptoms, concomitant and past medical conditions, medications, allergies, systematic enquiry of symptoms as well as family, occupational and social histories. The location and distribution of lesions or rashes on the body as part of the examination is crucially important. The limits to the telemedical consultation for dermatology includes the correct lighting and palpation of the skin.

Our new system using entirely web based technologies incorporates both the existing models and in addition presents all possible information with clarity to the clinician to optimise the accuracy of diagnosis. The system takes a full standardised, comprehensive history using 3d body imagery to record the sites of rashes and skin lesions. The information is then presented to the clinician in a predominantly pictorial fashion to visualise the person’s record. Furthermore, the ability of the system to learn the construction of diagnoses through the timing and relationship of symptoms, examinations and other factors in the history constitutes intelligence that has the potential to support to the clinician either locally or remotely in making the correct diagnosis. The full evaluation of this potential will give new insight into the practice of healthcare professionals in diagnosing and managing conditions to improve and standardise healthcare whether in primary or secondary care or in the developed or developing world.

Thursday, 16th October 2008
10.30 – 11.30:
Clinical Dermatology

Transcontinental Dermatology – an experience in web-based dermatology

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The Internet has revolutionized the way we communicate with one another, and email has opened up avenues for communication across the continents. Experiences with Teledermatology demonstrate that the ability to share cases over the Internet can be both a teaching and a learning experience and more importantly can serve as a modality to improve patient care. This may be a new paradigm for medical education.
Virtual Grand Rounds in Dermatology is a prototype for what can be launched by academic and clinical dermatologists with few resources and those who practice at a remote from university hospitals and tertiary referral centers. It would be a fledgling gathering place for dermatologists distributed over a wide geographical net to meet with one another and share interesting and/or challenging patients. A relatively isolated dermatologist can now consult with peers around the world. We can all now be in touch with our colleagues if we can spend time to learn how to use email, a digital camera and a microscope.

Content analysis of 500 clinical emails exchanged among physicians in academic dermatology practice

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Jayakar Thomas,  
Ian McColl,  
H. Peter Soyer,  
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Background:
The exchange of clinical emails among physicians to discuss difficult, challenging, and sometimes interesting cases with their colleagues in the country of origin or other countries has been very helpful both for the patients and the treating physicians in terms of diagnosis and treatment of such cases. It also provides a great opportunity to see cases which we rarely encounter in our practice. Most importantly, the exchange of emails among physicians is not limited by reservations over issues such as medico legal aspects,
Objective:
The objective of this study was to evaluate the content of clinical emails exchanged among physicians in academic dermatology practice.

Method:
We analyzed 500 clinical emails exchanged among physicians over a period of three years (i.e., from January 2005 to December 2007). The emails were divided into three categories based on their content: difficult cases with unknown diagnoses, difficult to treat cases with known diagnoses, and interesting cases.

Results:
Of the 500 emails exchanged over the study period, 39% emails consisted of queries requesting the opinion of other colleagues about the possible diagnoses or differential diagnoses of difficult to diagnose dermatologic cases. Most emails exchanged (42%) consisted of queries requesting the opinion of other colleagues about treatment options for difficult to treat chronic dermatologic diseases. The rest of the clinical emails (19%) consisted of interesting cases which were shared among colleagues.

Limitations:
This study was limited to the experience of eight dermatologists from seven different countries; Pakistan, India, Saudi Arabia, Australia, United States of America, Austria, and Croatia.

Conclusion:
The exchange of clinical emails among physicians is quite helpful to diagnose difficult cases, treat resistant cases, and share interesting cases. It also facilitates consultation with other physicians.

Overview of international Teledermatology - a clinician's perspective'

Karen McKoy

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This presentation will discuss not only the types of teledermatology activity practiced in various countries, but also using teledermatology as a charitable tool to educate and to aid those in underserved and impoverished regions of the world. Goals of the presentation are:

• to discuss the various types and reasons for current international teledermatology practices
• to examine the challenges of providing teledermatology consultation to those in developing countries
to prepare those who may be interested in voluntary participation in the arena of international teledermatology
An invitation will be issued and methods discussed to participate in this growing international collaboration to share knowledge and to try to "flatten the world" for those who are less fortunate.

**Thursday, 16th October 2008**
**13.30 – 14.30:**
**Dermatosurgery**

**Facial rejuvenation with microneedling technique.**

*Apratim Goel*

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**BACKGROUND AND OBJECTIVE:** Even though we have the latest advanced laser treatments, microdermabrasion, chemical peels and light pulse skin rejuvenation treatments, these all have their limitations when treating a case of pitted acne scars in a dark skin patient. Also the cost of these procedures makes them difficult for a common man. Microneedling technique for CIT (collagen Induction therapy) with Dermaroller, which is an inexpensive disposable device gives good results in such patients.

**MATERIALS AND METHODS:** 45 Indian patients of skin type IV and V with mild to severe acne scars and sun damage were treated with Dermaroller device for rejuvenation. 3-5 treatments were performed under topical anaesthesia with interval of 4-6 weeks between each session.

**RESULTS:** Photographic as well as subjective assessment of the skin was done after 3 sessions in all patients. There was mild to moderate filling of the pits and scars. But coupled with the excellent facial rejuvenation with the skin getting softer, pore reduction and smoother skin, patient satisfaction level was high.

**CONCLUSIONS:** Considering the low cost of treatment, ease to operate the device, no downtime and the high patient satisfaction, dermaroller microneedling technique is an excellent tool for skin rejuvenation.

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**Role of Fractional Lasers Pixel**

*(Erbium YAG, Pixel Nd-YAG, Q switched YAG, Pixel long pulsed Nd-YAG) - An Indian experience*

*Rajendran S C*

Medical Director
National Skin and Hair Care Clinic,
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India
If you've considered traditional (ablative) laser skin resurfacing, dermabrasions or deep chemical peels – but were put off by fractional lasers (Pixel) perfect offers a great balance. It can provide the dramatic results of these procedures, but with fewer risks. Plus it reduces necessary healing time faster.

Pixel perfect works by creating thousands of microscopic perforations, but the skin around each of these perforations remains intact. This allows the skin's top layer to heal from the edge of these tiny holes very rapidly.

Not only is healing time is shortened considerably, but pixel perfect also comes with a lower risk of complications, as compared to traditional laser skin resurfacing.

Pixel lasers are indicated in the treatment of
- Rhytids
- Skin laxity
- Acne scar
- Melasma
- Post inflammatory hyper pigmentation
- Striae
- Keloid

These procedures can be combined with skin tightening and super hair removal.

**Basal Cell Carcinoma in the era of Teledermatology.**

*Sabitha L*

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With increasing life expectancy in all parts of the world, basal cell carcinoma (BCC) a disease of the aged and the white population is no longer confined to Australia and the United Kingdom and California. Incidence of BCC is increasing worldwide and more efficient management systems are required for this workload which includes training and audit.

Appropriate treatment for the individual person who has a BCC is selected based on the clinical diagnosis amongst other parameters with surgical excision of a lesion by 4 mm clear margin the most practiced treatment option. The **surgical scale** used at The Princess Royal Hospital, Hull (TPRH), uses the lesion size and body site to grade a suspected BCC on a scale of 1-12 which then allows the surgical skills required for the lesion’s removal to be matched to the competency of the surgeon. Completeness of excision is a marker of **surgical competence.** And the follow up determined by histological features.
Patients with narrow margins excision (pathological clearance of <1mm) at high risk areas are followed up at 6 monthly intervals. Furthermore, increasing litigation necessitates the need to maintain a good medical record. With advancing technology – new telemedicine / teledermatology, systems allow the referrer to triage BCC’s to the appropriate surgeon of competence, with real time monitoring of histopathology outcomes; the mapping of lesions on a body image allow follow up of patients with multiple lesions and lesions with < 1mm narrow margins of excision. Assessment of Medsystem will indicate the value of these different telemedical components in managing BCC.

Thursday, 16th October 2008
14.30 – 15.30:
Mixed Bag

Mobile Teledermatology

Peter Soyer H

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As a visual profession dermatology provides the perfect conditions for using telemedical tools and now in the 21st century we witness the incorporation of mobile communication devices. The implementation of wireless telecommunication such as Global Positioning Radio System (GPRS), Wireless Local Area Network (WLAN) and satellite communication is almost commonplace in developed nations and provides a platform for mobile telemedicine.

Whilst initial studies by Braun and colleagues of Geneva found limitations in image quality using new generation mobile phones, diagnostic evaluation was still deemed possible. Since then, technological improvements have translated diagnostically as seen in studies by colleagues from the Department of Dermatology in Graz whereby teledermatologists were able to reach correct diagnosis of melanoma in 96% of cases from mobile phone images. Further to this, the recent study of 58 subjects by the same group demonstrated full concordance between teleconsultation and face to face diagnosis in 73% of the cases (relative concordance 94%). In this study, patients asked their opinions indicated a reasonable level of acceptance coupled with a willingness to pay for such a service in the future.
Teledermatology has the ability to advance the reliability of diagnosis by expert consultations without expensive and time-consuming relocations. In addition, the quality of patient’s care will be raised and the costs of the health care system can be reduced.

**Teledermatology in sub-Saharan Africa**

*Carrie Kovarik*

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Information and communication technologies are rapidly spreading to the developing world, with the most notable effects seen in the access to mobile phones and internet. Worldwide, internet use has quadrupled since 2000, but the change is especially noticed in the developing countries of sub-Saharan Africa. Not only has the recent expansion of these communication technologies to the developing countries of sub-Saharan Africa played a vital role in economic growth and the reduction of poverty, but they have allowed remote access to advanced medical evaluation through telemedicine in regions that previously had little to no available health care. Dermatology fits naturally into the practice of telemedicine, given the visual nature of the specialty, and the advancement of technology in the developing world provides the opportunity to utilize teledermatology where dermatologic care is not available. Several studies have shown that store-and-forward teledermatology results in similar clinical outcomes to conventional clinic-based care. This type of teledermatology is an inexpensive and effective method to provide dermatology consultation services to developing countries with access to various communication technologies. Web-based platforms offer an organized method for providing telemedicine consultation services that are password protected. Many of these websites also have archives of cases that are accessible to users and provide a means of medical education and discussion. Although many telemedicine websites currently exist, very few are specialized to provide dermatologic care. Our website offers teledermatology consultation services specifically to English-speaking sub-Saharan Africa (www.telederm.org/africa). The sustainability of this network in sub-Saharan Africa depend on several factors, including the dedication of volunteer expert dermatology consultants, the consultant’s understanding of local disease and cultural issues, the continual support of communication technologies in the developing world, and the cooperation and partnership of local health care workers.

**A Critical Analysis of the Role of Telemedicine in Improving the Quality of Health Care Access in Global Rural Populations**

*John Bocachica*
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Rural Alaska and other communities such as rural Canada, face unique challenges in obtaining access to quality special health services including dermatology. The lack of connecting road systems in Alaska results in 75% of all of our communities and 25% of all our residents be unconnected by road to a hospital. These communities must depend on other modes of transport, such as playing, boats, and snow machine to access basic medical services. Travel costs engendered in transporting rural patients to urban medical centers can be prohibitive. Physicians and mid-level providers are scarce in Alaska and Canada's rural and remote locations. In a recent poll, Alaska ranked 48th among the 50 states in the ratio of doctors to patients. To make matters worse, the vast majority of physicians in Alaska are concentrated in the state's three urban areas with few providers located in the most rural areas of the state.

The advent of Teledermatology has proven to be a viable alternative to specialty health care access among rural populations. Teledermatology has assured access to quality health care services via interactive and store and forward technologies.

With telemedicine, health-care providers can increase efficiency through better management of information and data and can better provide access to more timely and convenient specialty healthcare services such as dermatology. Collaboration between our medical center and a federal medical access network allowing the use of a specific and user-friendly telemedicine server in conjunction with adequate training available to providers originating Teledermatology consults has been quite successful in dramatically improving dermatology health care access to rural areas.

Friday, 17th October 2008  
9.00 – 9.30:  
Guest Lecture

Whither Teledermatology

*Peter Soyer H*

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Teledermatology is still in its infancy and yet in the short time since its advent we have seen significant advancement. Previously, research has largely focused on the usability of such a service with much energy also invested into refining the technological applications. We can undoubtedly expect the continued improvements of technologies to facilitate a more accurate, timely and affordable telemedical service across all fields which translate perfectly to teledermatology due to its visual nature. Certainly in the future, mobile teledermatology specifically will gain momentum and further enable “home-based” patient centred-medicine empowering citizens to adopt an active role in their own health management. In this way too, teledermatology may provide the platform for a flexible triage system for dermatologic disorders in addition to the continued monitoring of established conditions.

The technological limitations in developing nations would prevent such permeation but would allow an improved consultation network for community health care centres giving global support to local physicians. Telemedicine therefore creates an interruption of the classical referral chain and provides time and place-independent care delivery. The successful establishment of a global telemedical service could substantially reduce the healthcare divide between developed and developing nations and would eliminate the impact of local specialist shortages across various fields.

In the future we are likely to also see a more concentrated effort directed towards tackling the logistical, organizational, financial, confidentiality and political issues that are currently hindering the implementation of telemedical services. The overall future aims for teledermatology will be to develop a global network of specialist consultation advice making super-specialization a reality to optimise better health care provision for all nations.

**Friday, 17th October 2008**
9.30 – 10.00:  
**Guest Lecture**

**Website design and usability**

_Amanda Oakley_

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Clinical Director of the Department of Dermatology 
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The presentation will outline research-based criteria for building a successful website, based on US Department of Health and Human Services guidelines. Numerous dermatology and other health-related sites will provide examples of the best and worst in website design.
Ethical Issues in Teledermatology

Satyanarayana Rao K. H.

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Introduction
Teledermatology can increase the reach of dermatologists and enhance the accessibility of specialist care. This exiting revolution has brought in new ethical challenges. There is need to sensitize ourselves regarding principles of ethics and their application.

Doctor-Patient Relationship
Good relationship between doctor and patient needs mutual trust. This is already strained because of various factors. In teledermatology there is a barrier between care giver and care seeker. Lack of personal and human touch can adversely affect the outcome of treatment.

Universal Ethical Principles
The main principles are autonomy, non-malificence, beneficence and justice. Autonomy gives the patient freedom to choose medical intervention. The concept of informed consent, privacy and confidentiality also arise from it. “Above all do no harm” is the gist of second principle. The third principle demands that benefit to the patient should be the sole concern. Competency and standard care have to be ensured. Justice demands non-discrimination, fair distribution of resources, risks and benefits.

Ethics and Teledermatology
Benefits to society include cost effective and fast door delivery of specialist care to remote areas. Its limitations include lack of personal contact and emergency care. Possible risks to patients include sub-standard care and threat to privacy and confidentiality. Other issues include competence of teleconsultants, their accreditation and accountability, insurance coverage and errors arising out of problems with equipments and systems.

Conclusion
Distributive justice demands prudent use of available resources. Over reliance on technology can adversely affect doctor-patient relationship. Teledermatology can avoid many direct consultations but has constraints and limitations. Quality of care, registration and accreditation of teleconsultants, accountability, consent and confidentiality of medical data are important issues. We must be vigilant to identify as yet unrecognized risks of telepractice.
Five Years of International Society of Teledermatology

Gerald Gabler

Secretary
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A short presentation will be given about the first 5 years of the International Society of Teledermatology (ISTD). The purpose of the ISTD is the comprehensive promotion of teledermatology. As a really international organization at present the society has about 450 members from 70 countries. ISTD itself is member of the International Society for Telemedicine & eHealth.

The ISTD developed from the European Teledermatology Society as a result of discussion of board members during the European Teledermatology Congress in Graz 2003.

Major activities of the society have been and will be organizing the First and the Second World Congress of Teledermatology.

Aims of the society are amongst others: Internationally exchanging experience in order to coordinate international activities in the field of teledermatology, communicating and publishing common quality standards for diagnosis and management of skin diseases in the field of teledermatology, organising scientific congresses and educational courses, publishing teleeducation programmes on teledermatology and generally coordinating and stimulating scientific work in the teledermatology field.

The ISTD runs the telederm.org platform, which was conceived in 2002 and is aimed in order to exchange knowledge and expertise on a worldwide level. The goal of the community for teledermatology is to creating a surplus value for experts, physicians and healthcare workers interested in dermatology and teledermatology.

Teledermatology and the concept of Community Services

Anil K. Jha

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Teledermatology, a wing of telemedicine has become a useful and popular tool for global interaction between Dermatologists, General practitioners, Undergraduate and Postgraduate students. In this way it has certainly proved to be a convenient mode of exchanging, gaining knowledge and helpful in education, academic and research activities. There may be multiple other creative uses of Teledermatology too. One of the
innovative concepts of Teledermatology could be, approaching and treating the remote communities where Dermatologists are either not available or very far from reach. The innovative and the practical concept of community services by means of Teledermatology will be shared during the presentation.

Friday, 17th October 2008
11.30 – 12.30:
Clinical Dermatology

Classification of teledermatology: What dermatoses? Which technology to apply?

Kanthraj G. R.

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Skew distribution of dermatologists is a universal problem to adopt teledermatology practice. Hybrid teledermatology, mobile teledermatology, Integration model, nurse-led teledermatology, teledermatology focusing difficult – to - manage cases, screening and triage services are the various teledermatology services developed to suit the needs of dermatology care at a distance. This lecture reviews the literature, analyzes the classification based on utility and designs a protocol for teledermatology practice. What dermatoses require store and forward teledermatology? What dermatoses require video conference services? When to use cellular services? Types of teledermatology service, pattern of net work connectivity and purpose of dermatology service are the three cardinal parameters for management of the dermatoses at a distance. Ideal teledermatology service should cover all beneficiaries and utilize the available health care professionals to deliver the quality health care.

Rosacea – UPDATE

Sanjiv Kandhari

Consultant Dermatologist
Batra Hospital,
Escorts Heart Hospital,
Vimhans and
Orthonova, New Delhi,
A Centro facial dermatosis characterized by persistent erythema (>3 months), flushing, papules, and pustules often accompanied with ocular inflammation and rhinophyma. Prevalence in most studies ranges from 0.09 to 1.5%. Common in fair skinned sun sensitive, genetically predisposed individuals (F>M) especially hailing from Northern Europe and Celtic ancestry peak onset is in the 4th decade. Convexities of face are more affected (?) Role of UVL). Whereas a bald scalp is affected a scalp with full hair is unaffected. Tendency to spare peri-ocular skin yet > 50% patients have associated ocular changes. There is a good response to antibiotic therapy. The distribution of the rash is on areas with ↑Pilosebaceous gland activity and yet it is un-associated with seborrhoea or acne. Postulated etiologies are considered in the light of these findings which include genetic, vascular hypothesis, Demodex overpopulation, H.pylori and chemical & ingested agents. The problem being of explaining the varied clinical expression of Rosacea through one isolated mechanistic theory. Also does Rosacea progress from one stage to the other, is probably true only for Papulo-Pustular Rosacea or Granulomatous Rosacea. There are now formal guidelines for diagnosis of Rosacea, and its grading/staging its 4 subtypes being Erythematotelangiectatic Rosacea (ETR), Papulo-Pustular Rosacea (PPR), Phymatous Rosacea (PR) and Ocular Rosacea (OR), with 1 variant granulomatous. A new sub type – Neuropathic Rosacea is in the offing. Treatment of Rosacea is difficult with no set target or pattern for therapy, thus why it responds to a particular therapy is not fully understood. There are newer guidelines for use of sunscreens and cosmetics in ETR, Newer agents like tacrolimus, dapsone, green tea extract and Biologic response modifiers are being tried locally and Newer modified forms of older remedies like Metronidazole, Sodium Sulphacetamide etc are now available. In systemic therapy, low dose Isotretinoin and low dose Tetracyclines exerting anti-inflammatory effects that are distinct from their anti-microbial effects are being used increasingly. Laser’s and light therapies (IPL) are being used in ETR, and for phymata ablation, and also for dermal collagen remodeling and non-ablative rejuvenation of epidermal barrier. A multi pass treatment with different lasers coupled with IPL is now being currently used to include smaller BV, deep dermal BV and treat papules and pustules.

**e-learning in Dermoscopy: Experience and Evaluation of the International Dermoscopy Diploma**

*Rainer Hofmann-Wellenhof*  
*H. Peter Soyer*

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Graz, Austria  
& Dermatology Group, University of Queensland, Brisbane, Australia  
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The e-learning course International Dermoscopy Diploma has been running since two years. The course is a joint educational program of the Medical University of Graz, Austria and the Queensland University of Brisbane, Australia. Over 60 participants from 26 different countries passed the course.

The course is divided into ten different modules. Each module consists of different "learning units". These are sub-divided into "learning objects". Each learning object consists of four parts: the online presentation; a pdf-file for downloading, CBTs (Computer Based Training) for interactive use and a FAQ & Feedback area.

One module includes an interactive discussion of 20 different lesions, which are prepared by each participant and discussed with different tutors. All participants have assembled a data base of more than 1000 extraordinary dermoscopic cases.

The final examination consists of 180 multiple choice questions and the presentation of 3 cases including the dermoscopic report.

The evaluation of the course included the following items:
This e-learning course basically met my expectations. The teaching content of this e-learning course is relevant for my professional development. The teaching quality of this e-learning course basically was good. The teaching qualification of the faculty tutors was excellent. The additional teaching material (e.g. PDFs) was helpful in regard to elaborating the teaching content. The number of modules and learning units was sufficient for delivering the content. The support provided by team in regard to organizational aspects was sufficient. The very good acceptance was documented by an evaluation value from 1.09 to 1.5 of a scale ranging from 1= very good to 6= very poor.

In conclusion the International Dermoscopy Diploma fulfilled the expectations of the participants and can be considered as an appropriate e-learning program to teach dermoscopy.

Friday, 17th October 2008
14.30 – 15.30:
Dermatopathology

Teledermatopathology

H. Peter Soyer

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Teledermatopathology combines microscopic and communication technologies to facilitate the remote diagnosis of skin specimens. This modern diagnostic approach may
involve a dynamic real-time transmission of images via a robotic microscope operated by the consulting pathologist. Alternatively, a static store-and-forward (SAF) option may be employed and entails individual image capture of fields selected by the referring pathologist which are subsequently transmitted as a single file. Limitations imposed by the latter approach have been more recently overcome with the introduction of virtual slide systems (VSS). These enable the digitization of whole slides at high resolutions and may be made available on the web by a specific server to be browsed by clients. For dermatopathological diagnosis, the knowledge of skin biology and semiotics should be considered in conjunction with the clinical background. The diagnostic impact of information including clinical and dermoscopic images has been demonstrated in a recent study in which unanimous diagnosis between histopathologists was reached in 51.5% of equivocal melanocytic lesions with full provision of clinical background compared with only 36.3% in cases of microscopic examination alone. In this study it was also seen that clinical information including dermoscopic and clinical images may change diagnosis. With modern technological advance and the provision of the clinical information as above, teledermatopathology has the potential to reach beyond the classic diagnostic approaches in pathology and dermatology and provide valuable medical management for people in remote locations.

**Adnexal tumours : Eccrine Tumours**

*Jayaraaman AM*

Dean,
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Adenexal tumours are less reported in Indian literature. That prompted me to present this topic with clinical and histopathological features so that the eyes will see what the mind knows.

Adenexal tumours are both benign and malignant. The tumours differentiate towards hair, sebaceous gland, apocrine gland and eccrine gland structures. There is numerous numbers of tumours each appendage. The presentation is limited to eccrine tumours. The benign eccrine tumours are eccrine nevus, eccrine angiomatous hamartoma, eccrine hydrocystoma, eccrine cylindroma, eccrine poroma, spiradenoma, hidradenoma, syringoma, chondroid syringoma, papillary eccrine adenoma and dermal ductal tumour. Malignant eccrine tumours are either primary or secondary conversions. Primary tumours are eccrine adenocarcinoma, syringoid carcinoma, microcystic adenexal carcinoma, and mucinous eccrine carcinoma, malignant and adenoid cystic carcinoma. Secondary conversion is from benign tumours which are malignant eccrine cylindroma, malignant eccrine spiradenoma, malignant eccrine poroma and others.
Dermatoscopy on Pigmentary Disorders

Uday Khopkar
Professor and Head,
KEM Hospital, Mumbai
India

Traditionally dermatoscopy has been used for early diagnosis of melanoma in skin Types I-III. However, due to its ability to magnify surface and subsurface features and to store or analyze these images, it may be used for diagnosis and monitoring of pigmentary disorders in the skin Types IV-IV.
I have used dermatoscopy for early diagnosis of vitiligo, differentiating vitiligo from nevus depigmentosus, differentiating guttate vitiligo from idiopathic guttate hypomelanosis, differentiation of lichen sclerosus from other guttate hypomelanoses, and for early diagnosis of Schamberg’s disease. It is also useful for predicting prognosis in vitiligo. Telling dermal melasma from epidermal melasma is easily possible with dermatoscopy.
More frequent use of dermatoscopy by clinicians can obviate some skin biopsies. Dermatoscopy has the potential to be an indispensable bedside tool for clinical dermatologists.

Saturday, 18th October 2008
9.00 – 10.00:
Guest Lectures

Teledermatology: Safe and Reimbursed

Leonard Witkamp

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In The Netherlands, 50% of all general practitioners (n=8200) practice TeleDermatology on a regional basis together with 40% of all dermatologists (n=385). The number of TeleConsultations is increasing. In 2006, 8,000 TeleDermatology Consultations have
been performed. In 2007, this has increased to 15.000. For 2008, in total 30.000 TeleDermatology Consultations are projected. TeleDermatology leads to 70% reduction of physical referrals to the dermatologist in those patients that the general practitioner intends to physically refer to the dermatologist (71.8% of all teledermatology consultations). In 28.2% percent, the general practitioner asks for advice for diagnosis and/or (better) treatment. The dermatologist responds meanly within 5, 6 working hours, resulting in prompt and better care for the patient in stead of being on a waiting list for 2 – 4 months. TeleDermatology saves 25 – 35% of medical costs, depending on the fee for teledermatology and for the costs of regular dermatological care. This does not include cost savings from prevented traveling or absence from work.

Patients are highly satisfied because of earlier and better treatment, close to their home, general practitioners because of the learning effect and better service to their patients and dermatologist because they like to do TeleDermatology and the intensified relation with their regional general practitioners.

The KSYOS TeleDermatology System that is used meets national standards for safe medical communication over the internet. KSYOS TeleMedical Centre has officially been recognized as health institution on December 30th, 2005. It is the first virtual health institution, working with over 2000 doctors. KSYOS TeleMedical Centre is successful because it delivers the total spectrum of software, hardware (TeleDermatology adapted digital camera’s, docking stations), education, support, quality monitoring, administration and billing. It is bound to legislation with regards to privacy procedures, protocols for the management of patient data. Control and audit procedures as well as internal responsibilities have been taken care of. It facilitates TeleDermatology, but also TeleOphthalmology, TeleSpirometry and TeleCardiology. It is setting up new projects in Belgium, Scotland, Italy, Austria and Germany.

Telemedicine and Teledermatology: Past, present and future

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Telemedicine is an emerging field within medicine with potential to revolutionize the delivery of health care. It is defined as the use of telecommunication technologies to transfer medical information. Teledermatology, dermatology application of telemedicine, is one of the most often applied telemedicine applications worldwide. Early experiments were already made at the beginning of the 20th century, the breakthrough happened in the nineties because of the rapid progress of telecommunication technology. There is a growing interest in teledermatology in today's clinical practice, but the maturity of the evaluation research of this technology is still unclear. The latest advance is mobile telemedicine which is characterized by the use of mobile devices such as mobile phone
and PDA (personal digital assistant). Advantages of telemedicine are the possibility of remote patient-care as well as the easy and fast access to expert opinions and education. This can either happen through exchange of previously stored data/images (store-and-forward method) or in real time. Since our society is increasingly becoming interconnected via technical advances, it is essential that medicine also has an objective understanding of the topic. Compared with other specialties in telemedicine (i.e. telesurgery, telepaediatrics), teledermatology seems to be a mature application. However, more evaluation studies with a focus on clinical outcomes such as preventable referrals or time to recovery are needed to prove that teledermatology indeed is a promising and cost-saving technology.

Posters

Poster No: 1

Inverted squamous cell papilloma developing over scar tissue with associated lichen planus – an unusual presentation

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Introduction
Inverted squamous cell papilloma is a benign epithelial neoplasm characterized by an endophytic growth, papillary pattern, and proliferation of neoplastic squamous cells without morphologic evidence of malignancy.

Case report
35 year old male presented with multiple intensely itchy lesions over both legs of 7 years duration and a growth over a scar on the right lower leg since 4 months. The scar was secondary to an injury he had sustained during childhood. There was sudden increase in size of the scar along with a new growth over it following application of local irritants over the legs for the itchy lesions. Examination revealed

1. Multiple hyperpigmented hyperkeratotic papules and plaques with depigmented surface present over both lower legs, mainly on the extensor aspects.
2. A large irregular growth measuring about 5x7 cms in size with well defined borders over the right lower leg.
Biopsy of the itchy hyperpigmented lesions revealed lichen planus actinicus
Edge biopsy of the irregular growth showed features suggestive of inverted squamous cell papilloma

**Conclusion**
Inverted squamous cell papilloma over a scar tissue is a rare phenomenon but in association with lichen planus is an extremely rare association and hence for its rarity we present this case.

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**Poster No: 2**

**Olmsted Syndrome - A case presentation**

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Olmsted syndrome is an uncommon inherited disorder of keratinization that presents mutilating palmoplantar keratoderma, perioral hyperkeratosis, leukokeratosis and alopecia. We report a case of this rare syndrome diagnosed in a 12-year-old boy presented with short stature, palmoplantar keratoderma, short and sparse hair on scalp, brittle nails, keratotic plaques at the angles of mouth, gluteal cleft, features of Olmsted syndrome.

The skin biopsy showed features of palmoplantar keratoderma. He was given acitretin in dose of 1 mg/kg/day.

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**Poster No: 3**

**Teledermatology - experience at a referral center – practical issues**

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We have been having teledermatology consultation from various areas of India for the last 4 years. This includes store-and-forward, realtime and hybrid consultations. Though there is no doubt that teledermatology will have an increasingly important role to play in the future, at present there are a number of practical issues which need to be addressed before the full benefit of teledermatology can reach both the patient and the physician.
The best results in terms of certainty of diagnosis we felt was in the hybrid type of teledermatology consultation – where the store and forward and real-time consults are combined.

The biggest issue as far as real-time consults were concerned was clarity of the video (We have included some video clips of our teledermatology consults to illustrate this point)

Ethical-legal issues are another area of concern which needs to be addressed categorically.

Poster No: 4

Evaluation of efficacy and safety of NBUVB and calcipotriol versus NBUVB in the treatment of vitiligo patients with generalized disease

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Vitiligo is a common, idiopathic, acquired, depigmenting disease characterized by loss of normal melanin pigments in the skin. There is no definite cure for vitiligo; however, treatment responses with photo biological modalities are quite acceptable. Of all these, narrow-band UVB phototherapy was proposed rather recently. Calcipotriol has been shown to have stimulating activity on melanogenesis besides immunomodulatory and anti-inflammatory effects. This study was performed to determine safety and efficacy of narrow-band ultraviolet B as immunotherapy and in combination with topical calcipotriol in the treatment of generalized vitiligo. In this prospective, single-blinded, right-left comparison clinical study, 26 patients with generalized vitiligo were enrolled. Symmetrical lesions on the trunk and limbs were selected as reference lesions. In addition to narrow-band UVB, received three times weekly, the patients were asked to apply 0.005% topical calcipotriol on the selected side of the reference lesions twice daily. Then, they were monitored at the end of every 12-session interval. Excellent repigmentation (76-100%) was observed in 30.8% (8/26) of the patients without taking calcipotriol in the end of therapy in compared with 7.7% (2/26) with taking calcipotriol (P<0.05). There was statistically significant better response on the side that calcipotriol was not applied at the 24th session.
No statistically significant difference was found between the calcipotriol-treated and non-treated side at 60th session (P>0.05). Our data confirm that, narrow-band UVB phototherapy is effective by itself in vitiligo, and show that adding topical calcipotriol does not improve treatment outcome.

Poster No: 5

The role of teledermatology in residency training

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Teledermatology is a unique way of practicing the profession of dermatology. The exercise of differential diagnosis and management algorithms becomes paramount since we are limited in our ability to examine the patient. This is an unexpected learning tool that teledermatology provides. The most common way residents are evaluated by faculty dermatologists is by the faculty recalling perceived strengths, major recurring issues, and gaps in knowledge. It includes formal and non-formal methods of training. The traditional method of training is not a completely independent and objective assessment of the resident's knowledge. With teledermatology, residents must change the way they approach a skin condition. They must document their thought processes for determining the diagnosis and management plan, formulate the differential diagnosis and a treatment plan in an algorithm format, and learn to utilize available references other than immediate faculty feedback, thus increasing their knowledge base. The aim of this paper is to highlight how teledermatology provides an additional means for residents to develop their diagnostic and management skills. Teledermatology adds a new facet to resident education and can provide a useful assessment tool for resident competency in dermatology.
Poster No: 6

Link to the Internet

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The Internet has changed the practice of science and medicine, including dermatology. Virtually anybody can gain access to the world’s largest library of information, the World Wide Web. Dermatological diagnoses are to a large degree based on visual inspection of the skin. This makes the Internet, with its ability to transmit images, a potentially important and practical tool for dermatologists. Unfortunately, a vast majority of dermatologists do not realize the full potential of the Internet and are unable to use it effectively to maximum advantage. A few reasons for this are lack of formal training in using the computer and the Internet, lack of time, and lack of commitment in trying to learn something new and apparently advanced. The Internet is perceived as a technological tool beyond reach, and hence this further adds to the frustration of the doctor trying to use it.

The aim of this paper is to reveal a few basic tips on how to effectively use the Internet, the benefits and drawbacks of using Internet, performing a specific literature search, and an overview of important websites pertaining to dermatology journals, educational material and image atlases. This should serve as a stepping stone before taking a leap towards productive usage of the Internet.
Ramsay Hunt Syndrome with disseminated Herpes Zoster in HIV patient – An unusual presentation

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Introduction
Ramsay Hunt syndrome (herpes zoster oticus) is a viral infection of the facial nerve that's accompanied by painful rash and facial muscle weakness.

Case report
A 27 year old male patient presented with fluid filled lesions over right side of face, right external auditory meatus, deviation of the angle of mouth to left side while talking, difficulty in closing right eye & loss of taste sensation over anterior 2/3 rd of the tongue since 20 days. Difficulty in hearing in right side since 7 days. He also had associated extensive fluid filled lesions over the entire trunk along with the above symptoms. He was also diagnosed as HIV positive.
Examination revealed multiple tense grouped vesicles over the external auditory meatus, external ear, preauricular area and cheek of right side. Had right sided LMN type of facial palsy with inability to close right eye. Associated drooling of saliva in the right side was present. Discrete vesicles more than 20 in number present over both sides of trunk.

Conclusion
Ramsay Hunt syndrome is a very rare condition with incidence of 5 per 1 lakh and our patient also had disseminated herpes zoster. Hence we present this case for its rarity. Clinical features are acute facial nerve paralysis,

**Poster No: 8**

**Erythema Elevatum Diutinum**

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**Introduction**

Erythema elevatum diutinum is a rare, chronic skin disease that is characterized by reddish-brown papules, plaques, and nodules that are usually distributed acrally and symmetrically over extensor surfaces. It is characterized histologically by a leukocytoclastic vasculitis. The etiology is not exactly known.

**Case Report**

A 39 year old male presented with history of relatively asymptomatic reddish-brown raised lesions over the ears, extensors of extremities and joints since six years, gradually increasing in size. On examination, his vital parameters were within normal limits. There were multiple firm hyperpigmented nodules over both ear pinnae; multiple well demarcated, rough, hyperpigmented plaques over the knuckles of both hands, both elbows, both knees and both feet. In addition to this, there were tender, verrucous growths over the soles of both feet. There was no significant lymphadenopathy, hepatosplenomegaly or joint deformity. The CBC, renal and liver function tests, lipid profile, X-ray chest and ECG were within normal limits. ASLO titre was normal; RA factor and ELISA for HIV were negative. The urine examination was normal. Skin biopsies from a plaque over the right elbow and a verrucous growth over the right sole
revealed features of leukocytoclastic vasculitis. Based on the clinical findings and investigations, the diagnosis of Erythema elevatum diutinum was made. The patient was started orally on 100mg dapsone twice daily along with 5mg prednisolone once daily. Shave excision and dermabrasion was done for the growths over the soles. Patient is on regular follow up every month and shows remarkable improvement with decrease in size of lesions.

Conclusions
This case is being presented for its rarity and to demonstrate the necessity of ruling out possible underlying causes of the condition. A few lesions were atypical and effectively treated using a combination of medical and surgical management.

Poster No: 9

Effect of Low Molecular Weight Dextran (LMWD) in Vasculitis
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Two cases of vasculitis (one pyoderma gangrenosum and the other leucocytoclastic vasculitis) that were not remitting with pulse steroid and immunosuppressive therapy was given LMWD and was seen to respond dramatically.

Case 1: Thirty-eight- year old female, a case of pyoderma gangrenosum, did not show remission with methyl prednisolone pulse therapy, cyclophosphamide and azathioprine.
Case 2: Fifty-year-old female with recurrent attacks of leucocytoclastic vasculitis, was treated with steroid pulse therapy with cyclophosphamide without any improvement.

Both patients were investigated to rule out haematologic abnormality, cardiac, renal and hepatic dysfunction and given LMWD in addition to their Methyl prednisolone pulse. Both showed dramatic improvement after the first course and by the third cycle there was complete remission. They are now followed-up with LMWD and one day methyl prednisolone monthly pulse with no recurrence for the last 10 months. LMWD a mixture of dextrose polymer with an average molecular weight of 40,000 acts by lowering viscosity of blood and platelet adhesion. It also inhibits adhesion of T cells to endothelial cells. However the exact mechanism of action in vasculitis is yet to be proved. LMWD seems to be a cost effective additional therapy in recalcitrant cases of vasculitis.
The use of Mobile phones for skin tumor screening

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A lot of importance is attributed to mobile telemedicine these days, a topic that encompasses a wide and ever growing range of applications. Small, handheld devices such as camera mobile phones have come into every day use providing technically sophisticated tasks on a user-friendly level and can therefore be easily used in various fields of telemedicine. Dermatology is a perfect candidate for the use of telemedicine tools in general, as well as mobile devices in particular.

This study emphasized on a wide range of tumours skin lesions (benign and malignant) and was conducted with a modern cellular phone with a built-in 3.2 mega pixel camera with auto focus, macro mode and zoom. One-hundred patients presenting with one or more particular skin tumours were selected consecutively at the outpatient clinic of the Department of Dermatology, Medical University of Graz, Graz (Austria). In each case a close up clinical image and a dermoscopic image applying the cellular phone on a pocket dermoscopy device has been taken.

The clinical and dermoscopic pictures have been uploaded separately along with specific information concerning the patient (age, sex, and localisation). An experienced teleconsultant reviewed the images on a specific web application, a virtual private network based on a store and forward system, where images had been uploaded in JPEG.
format. The telediagnoses were then compared to the face-to-face diagnoses made by the dermatologists at the outpatient department as well as the histological findings. We calculated a cross tabulation which displays the number of cases in each category defined by the variables cellular phone image and dermoscopic image. The total number of cases was 107. According to our data the clinical diagnosis was detected with cellular phone imaging correctly in 86.9% of all cases and with dermoscopic imaging in 76.6%. In 72.9% both imaging techniques detected the clinical diagnosis correctly. The three most frequent diagnosed skin lesions in our 107 cases were basal cell carcinoma (BCC, 33 cases), melanocytic nevus (MN, 18 cases) and actinic keratosis (AK, 15 cases). We foresee that in the near future mobile telemedicine will exceed its current limits and will be implemented in various fields of Medicine. Mobile phones may have a special function for online consultation including advice and follow up for dermatological conditions and as triage system for new and suspicious skin tumors.