RESIDENT dream

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IADVL Newsletter For The Residents

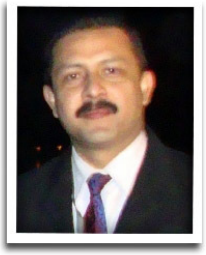
RESIDENT DREAM

Dermatology Residents Education And Motivation Bulletin

January - April 2016, Vol.3, No.1. *A newsletter for IADVL Residents*

From The Desk Of The Hon. Secretary General

"Tell me and I forget, teach me and I may remember, involve me and I learn" — Benjamin Franklin



The Resident Forum attempts to bring to the fore the talents and aspirations of the young residents of our association and offers them a national platform to bounce off ideas with their peers all across our vast country and interact with and learn from the seniors and doyens of our composite specialty.

I must thank my predecessor, Dr. Rashmi Sarkar, for conceptualizing this forum and fostering its steady growth over the last two years, with the generous support of the dynamic Presidents – Dr. Deepak Parikh and Dr. Venkataram Mysore – and their respective ECs of 2014 and 2015.

I am glad to shoulder the responsibility of carrying this vision forward and building on the good work done. I look forward to the suggestions and cooperation of the President, Dr. Devesh Mishra, the EC 2016 and all members in this endeavour.

As the Resident DREAM (Dermatology Residents' Education And Motivation) newsletter enters its third year, we have a fresh editorial team of talented residents from all over the country, led by the immensely capable Dr. Anupam Das as the Chief Editor. We also have on board Dr. Rashmi Sarkar and Dr. Ishad Agarwal as Advisors for this year.

This newsletter, the mouthpiece of the residents, by the residents, and for the residents, addresses their concerns and provides a roadmap to prepare them for life after residency. I sincerely hope that this bulletin continues to resonate with the fresh ideas and concepts of dermatology residents from all over the country and help prepare them for greater roles in the specialty and the association.

I sign off by wishing all residents the very best for a bright future ahead.

Dr. Shyamanta Barua
Hon. Secretary General, IADVL

From the Editor's desk :




The first step towards a brand new journey...
here we go!!






Residream, the brainchild of Prof. Rashmi Sarkar, has evolved over the past two years and we have grown along with it. Residream gave us feeling of ownership, of group work, of collaboration. We hope the upcoming editorial team develops similar chemistry and bonding, and can rise beyond their own personal comfort zones, as we did. We welcome you all!

To keep our newsletter a pan India phenomenon, our editorial team and our writers come from different geographic locations in India. Prof Rashmi Sarkar and Dr Ishad Aggarwal have been instrumental in bringing out this issue, as the senior advisors. Dr. Somodyuti Chandra (our representative from East) along with her guide Dr. Nilay Kanti Das from Medical College and Hospital, Kolkata present a comprehensive discussion on lepromatous leprosy, from the perspective of an exam going resident. Dr. Varun Khullar (our representative from North) from Rohilkhand Medical College and Hospital, gives us a crisp glimpse of Holi dermatoses – the causes, signs, symptoms and the management. Besides, he has designed a beautiful coverpage for us. Dr. Shankila Mittal and Dr. Isha Narang, residents of Maulana Azad Medical College, Delhi fight out their battle on evidence versus experience in medicine, which is indeed a pleasure to go through. Major Pankaj Das, AFMC Pune (our representative from West) champion of many quizzes, along with his teacher Col. Rajesh Verma, Professor, HOD and Senior Advisor, Base Hospital, Lucknow will test your knowledge through an interesting crossword puzzle, which is definitely going to stimulate your grey

matter. Dr Akshi Bansal (our representative from South) from Bangalore Medical College and Research Institute along with her mentor, shares her experience of using secukinumab in the management of psoriasis. Dr. Dipti Das from Mumbai, recipient of IADVL scholarship to attend the AAD Summer Meet 2016, shares her experience. It is indeed an honour to gave Dr. Trilokraj Tejasvi, Assistant Professor, Department of Dermatology and Director of Teledermatology, University of Michigan in this issue. He shares with us, his journey till date and answers some of the very pertinent questions coming to residents' mind.

It has been a pleasurable experience working with young, fresh, raw and enthusiastic minds. And yes they have excelled to deliver a great first issue of the year. We thought of giving you an eclectic mix and to cover a wide range of topics. We may have passed out of our colleges, but just like our alma mater, Residream is an institution, we can not say good bye to. We hope we succeed in giving wings to this tradition and make it a self sufficient process fuelled perpetually by grey matter of all successive generations. We hope you like this issue, churned out fresh and crisp from the brain factory of our new editorial team. We would sincerely like to thank the members of our maiden Residream team, Dr. Saloni Katoch, Dr. Jimish Bagadia, Dr. Zubin Mandlewala, Dr Indrashis Podder, Dr. Aayushi Mehta, Dr. Gillian Britto, Dr. Sumit Gupta, Dr Anuj Tenani, Dr. Sahil Mrigpuri and Dr. Samujjala Deb for their constant support throughout.

Happy reading to all! Let there be fire, let there be desire and let there be a spark in your minds.

"The lightning spark of thought generated in a solitary mind awakens its likeness in another mind." - Thomas Carlyle

Signing off

Dr. Anupam Das, Chief Editor, Residream
Dr. Ishad Aggarwal, Senior Advisor

HIGHLIGHT

APPROACH TO LEPROMATOUS LEPROSY – EXAM CASE
Dr. Somodyuti Chandra

EVIDENCE Vs EXPERIENCE
Dr. Shankila Mittal & Dr. Isha Narang

EXPERIENCE WITH SECUKINUMAB IN PSORIASIS
Dr. Akshi Bansal

HOLI DERMATOSES: RANG BARSE
Dr. Varun Khullar

MAAN KI BAAT WITH TRILOKRAJ TEJASVI
Dr. Trilokraj Tejasvi

EXPERIENCES IN AAD 74TH ANNUAL MEETING SCHOLARSHIP 2016
Dr. Dipti Das

EVENTS 2016

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APPROACH TO LEPROMATOUS LEPROSY – EXAM CASE

Summary of the case:

A 40 year farmer from Bihar presented with the complaints of intermittent fever, joint pain and swelling of both feet associated with reddish nodules all over the body for the last one month. The lesions were painful and appeared in crops coinciding with the episodes of fever with chill. Detailed history revealed presence of numerous asymptomatic hypopigmented lesions over trunk and legs for the last 1 year. He also a complained of slipping of chappals from feet, inability to button his shirt and unnoticed trivial injury resulted in non healing wounds. There was also history of chronic stuffiness of nose with occasional bleeding and recent onset broadening and sagging of the nose.

Cutaneous examination revealed multiple painful erythematous nodular lesions over face, trunk and extremities. Apart from this, symmetrically distributed numerous hypopigmented macules with ill-defined border over back and buttocks. The patient had leonine facies, nodules over ear, madarosis, anaesthesia over distal legs and feet. Gynecomastia was present and testicular sensation was absent. Both ulnar nerves and common peroneal nerves were found to be thickened and tender. Fever and conjuctival congestion was present. Trophic ulcer was present over ball of great toe.

Q. What is the final diagnosis in this case?

A. Hansen's disease (Highlighting the diagnosis) of lepromatous pole (highlighting the classification) with type 2 Lepra reaction (highlighting the presence/absence of Lepra reaction) with grade 2 disability (highlighting disability) arising due to trophic ulcer on sole (highlighting deformity)

Q. What are the points in favor?

a. For diagnosing Hansen's disease: Cardinal signs suggestive of Hansen's disease –

i. Hypopigmented patches, infiltrated plques
ii. Hypoesthesia or anesthesia
iii. Thickened peripheral nerves

b. For classifying Hansen's disease:

i. Skin lesions: Number of lesions (numerous), Presence of Symmetry, Size of lesions (small), Margin (ill-defined), Border (sloping border in LL nodules), Center (shiny nodule)

ii. Peripheral Nerves: Symmetrical thickening and nodularity of peripheral nerves

iii. Special features: Leonine facies, pedal edema

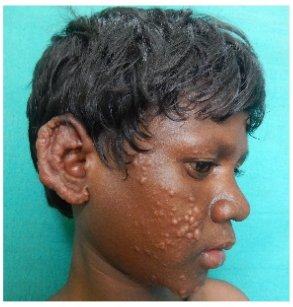


Fig 1. Shiny dome shaped papules of histoid Hansen

c. Presence of Type 2 Lepra reaction:

Presence of crops of erythematous papulo-nodules all over the body coinciding with episodic fever associated with arthritis, iridocyclitis, epididymo-orchitis.

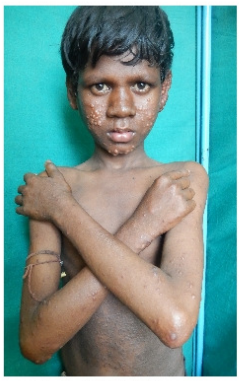
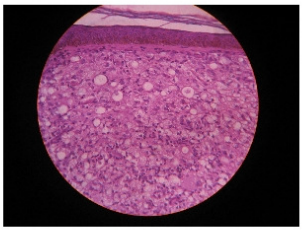


Fig 2. Histoid Hansen

Q. What are the relevant history to be enquired in this case?

History to rule out other differentials –

- H/O kala-azar in the past, residence in kala-azar endemic area, presence of photosensitivity (for PKDL)
- H/O high risk sexual behaviour and genital ulcer in the past (for secondary syphilis)
- H/O exertional breathlessness (relevant for sarcoidosis,)



Erythematous tender papules and plaques over extremities and trunk in a case of Type 2 lepra reaction

History of other systemic involvement –

- H/O decreased lacrimation, inability to close eyes, deep pain with redness and foreign body sensation in both eyes, diminished vision
- H/O testicular pain
- H/O swelling of breast tissue, infertility, decreased libido
- H/O bone pain particularly involving small bones of hands and feet
- H/O hoarseness of voice

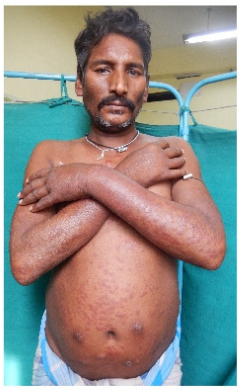


Fig 4. Histopathology of lepromatous leprosy

History of any possible precipitating event for Type 2 reaction–

- Whether spontaneous or precipitated following-

- H/O intercurrent infection, physical or mental stress, surgery, drug intake

Treatment history –

- H/O treatment with injectables for 21 days (suggestive of kala-azar)
- H/O treatment received for this condition in the form of blister pack and adherence or compliance to the treatment

Past history –

- Similar episode in the past
- H/O tuberculosis, diabetes, hypertension, bronchial asthma (treatment with steroid for Type 2 reaction may flare up these conditions)

Family history –

- H/O family members or close contacts having hypopigmented-hypoaesthetic patch
- H/O similar disease in the family or neighbourhood and whether they treatment received for the same

Q2. What are the relevant clinical examination needed?

General survey

Detailed examination to be done including

♦ Presence of bilateral pitting edema (relevant to lepromatous leprosy)

♦ Palpation of lymph nodes (in relevance to lepromatous leprosy, secondary syphilis, cutaneous T-cell lymphoma)

♦ Temperature will be raised during the period of Type 2 lepra reaction

Cutaneous examination

♦ Multiple erythematous tender nodules with smooth shiny surface present over face, ears, trunk and upper and lower extremities with characteristic sparing of the scalp, axillae and groins.

♦ Numerous small irregular hypopigmented macules with ill-defined margins present over back, buttocks and thighs with tendency to symmentry.

♦ Facial skin thickened and thrown into folds (leonine facies) with nodules over both ears including ear lobes. Broad nose with collapsed nasal bridge.

♦ Both testes are soft and shrunken with reduced testicular sensation

♦ Gynaecomastia (secondary to testicular atrophy)

♦ Hair – Loss of Eyebrows, eyelashes, axillary and pubic hair

Examination of mucosae

♦ Nasal mucosa – to look for crusting, presence of erosion over nasal septum and inferior turbinate

♦ Oral mucosa – to look for lip swelling, nodules and erosions over tongue, palate, uvula, loss of upper incisor teeth

Examination of peripheral nerves

♦ Peripheral nerves are palpated to note thickening, tenderness or nodularity, and compared with the opposite side; though in lepromatous leprosy they may be equally thickened on both sides. Nerves to be examined include:

♦ Supraorbital nerves

♦ Supratrochlear nerves

♦ Infraorbital nerves

♦ Temporal nerves

♦ Great auricular nerves

♦ Supraclavicular nerves

♦ Radial nerves

♦ Ulnar nerves

♦ Median nerves

♦ Radial cutaneous nerves

♦ Common peroneal

♦ Anterior tibial nerves

♦ Posterior tibial nerves

♦ Sural nerves

♦ Sensory examination – over the lesions as well as on the area supplied by the nerves

♦ Motor examination – of muscles of hands, forearm, legs

Examination of eyes

♦ Presence of peri-orbital skin lesions, frequency of blinking, excess lacrimation, conjunctival congestion is to be looked for.

♦ Corneal reflex and light reflex examination.

Examination of hands and feet

♦ Examination of hands and feet Presence of trophic ulcer (over pressure point) and deformities (claw hand, wrist drop, foot drop etc.) are to be looked for. In the present case non-healing, well defined, round/oval ulcers over the ball of great toe was present. The ulcer was surrounded by a rim of callus and floor is covered by slough with scanty sero-purulent discharge.

♦ Presence of muscular atrophy, loss of digits, obvious deformity are to be noted

Q. What are the atypical variants of lepromatous leprosy?

A. Lepromatous leprosy may have certain unusual presentations, which are as follows –

1. Localised lepromatous leprosy – It is characterised by a single nodule or a localised area of papulo-nodular lesions, having very high bacterial index while the rest of the skin is clinically and microbiologically normal.

2. Histoid leprosy – It is characterised by sudden appearance of dome-shaped, shiny, erythematous papulo-nodules mainly involving posterior and lateral aspect of arms, buttocks, thighs, bony prominences and dorsum of hands. Bacteriological and morphological indices of the lesions are very high (5+ or 6+) while it is negative in the uninvolved skin.

3. Spontaneous skin ulceration – It may occur without the presence of any reaction and may be the presenting feature of severe, long-standing and untreated LL. These mainly occur over the anterior thighs, calf, posterior arms and dorsum of forearms.

4. Lucio leprosy - It is characterised by uniformly diffuse, shiny infiltration of the entire skin of the body, thickened eyelids with madarosis, epistaxis, hoarseness of voice and peripheral edema and numbness of hands and feet. This variant is mostly encountered in Latin America.

Q. How will you treat this case?

A. Treatment consists of 3 parts:

a. Treatment of the disease

b. Treatment of reaction

c. Prevention and treatment of deformities

a. Treatment of the disease

- Standard adult treatment regimen for MB leprosy is:

  Rifampicin: 600 mg once a month

  Clofazimine: 300 mg once a month, and 50 mg daily

  Dapsone: 100 mg daily

  Duration: 12 months.

- Standard child treatment regimen for MB leprosy is:

  Rifampicin: 450 mg once a month

  Clofazimine: 150 mg once a month, and 50 mg every other day

  Dapsone: 50 mg daily

  Duration: 12 months.

c. Prevention and treatment of deformities

Trophic ulcers	• Rest • Cleaning of ulcer, scraping of callosity • Treatment of secondary infection with antimicrobials • Below knee POP cast – for prevention of weight bearing • Skin grafting for large, non healing ulcers • Preventive treatment – daily inspection of feet, soaking feet in lukewarm water, application of bland emollients • Micro cellular rubber (MCR) chappals recommended
Motor deficits (leading to claw hand, foot drop, wrist drop)	• Physiotherapy and graded exercises • Splints – dynamic and static splints • Reconstructive surgery
Iridocyclitis	• Topical or oral steroids • Atropine eye drops
Lagophthalmos	• Carboxymethyl cellulose eye drops • Using physical guard eg. spectacles • Lid exercises • Surgical correction
Acute epididymo-orchitis	• Oral steroid • Scrotal support

Q. What are the newer drugs in leprosy treatment ?

A.

Drugs	Mechanism of action
Fluoroquinolones (Ofloxacin, Pefloxacin, Moxifloxacin)	• Bactericidal drugs • Inhibits bacterial DNA gyrase ❼ inhibits bacterial DNA synthesis
Minocycline	• Bacteriostatic drug • Highly lipophilic drug. Penetrates bacterial cell wall easily and binds to the 30S ribosomal subunit, thereby blocking the binding of aminoacyl t-RNA to m-RNA ribosome complex ❼ Inhibition of protein synthesis
Macrolides (Clarithromycin)	• Bactericidal drug • Binds to bacterial 50S ribosomal subunit, thereby preventing peptide chain elongation ❼ Inhibition of protein synthesis
Rifapentine	• Bactericidal drug • Same MOA as rifampicin • Advantageous pharmacokinetic properties ❼ it has lower MIC and 3 times longer serum half-life than rifampicin
Hydrazones (Thiacetazone)	• Inhibits bacterial ribonucleotide reductase ❼ inhibition of DNA synthesis
Dihydrofolate reductase inhibitors (Brodimoprim, Epiroprim)	• Inhibits conversion of dihydrofolate to tetrahydrofolate by inhibiting the enzyme dihydrofolate reductase
Diuciphone	• Complement dapsone action by increasing its bacterial killing, decreasing its side effect and decreasing reactional episodes
Deoxyfructo-serotonin	• Bacteriostatic drug • Increases bacillary clearance and prevents nerve damage

Q. What are the alternative regimens for patients who cannot tolerate MDT due to adverse reactions or contraindications ?

A

Rifampicin contraindicated / not tolerated/resistant	Ofloxacin 400 mg OD + Minocycline 100 mg OD + Clofazimine 50mg OD X 6 months ↓Followed by Clofazimine 50 mg OD + ofloxacin 400 mg or minocycline 100 mg OD X 18 months
Clofazimine contraindicated/not tolerated/resistant	Rifampicin 600 mg + Ofloxacin 400 mg + Minocycline 100 mg X once a month X 24 months
Dapsone induced hypersensitivity syndrome or haemolytic anemia/ contraindicated	Dapsone should be stopped and treatment continued with rifampicin and clofazimine in the standard dosage for 12 months

b. Treatment of reaction of Type 2 Lepra reaction- ENL

Reactions require urgent treatment as they can lead to irreversible deformities. Thus, early diagnosis and the timely initiation of anti-inflammatory measures are crucial. MDT should be continued at full dosage without interruption.

Q. What are the late complications in Lepromatous leprosy?

A. I. Complications associated with steroid therapy to manage type 2 reaction:

- Metabolic : hypertension, hyperglycemia, weight gain
- GI : peptic ulcer, bowel perforation
- Osteoporosis, avascular necrosis of femoral head
- Proximal muscle myopathy
- Growth retardation
- Psychosis, depression, mood disorders
- Reactivation of pulmonary TB, herpes zoster
- HPA axis suppression

II. Complication of "delayed nerve fibrosis": Neural deficit continues even after complete cure.

Q. What are the histological finding expected in lepromatous leprosy?

A.

- Epidermal atrophy
- Well formed Grenz zone

- Diffuse granuloma extending upto subcutaneous fat. Granuloma contains profuse foamy macrophages and plasma cells with scanty lymphocytes and epitheloid cells
- Loss of appendages
- Clumps of bacilli (globi)

Q. What are the histological differential diagnosis ?

A.

I. Conditions where grenz zone may be found other than LL:

- BL, BB, BT
- Pseudolymphoma
- B-cell lymphoma
- Granuloma faciae

II. Conditions where foamy macrophages may be found :

- Atypical mycobacterial infection
- Xanthoma
- Necrobiotic xanthogranuloma
- Langerhans cell histiocytosis
- Sebaceous gland tumor

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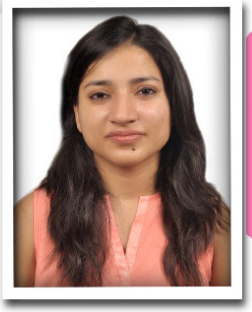

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EVIDENCE BASED MEDICINE(EBM)

"What can be asserted without evidence can also be dismissed without evidence."
- Christopher Hitchens

Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.

It is the use of therapy that had been proven and tested in a rigorous manner to the point that is becomes the state of art and so, is the most logical way of practice. It integrates individual clinical expertise and patient preferences with the best available external clinical evidence from systematic research, invalidating previously accepted diagnostic tests and treatments and replacing them with newer, more accurate, efficacious and safer ones. Only alternative to evidence based medicine would b "myth or rumor-based medicine" (quote attributed to Dr. Thomas Frühwald,) which is, obviously, not acceptable in today's era.

EXPERIENCE BASED MEDICINE (XBM)

"The only source of knowledge is experience"

- Albert Einstein

Evidence-based medicine (EBM) might have various controversial definitions, one needs to choose from, but experience needs no introduction. It has and will remain mother of all exploration and innovation.

In an era where healthcare has become a business, medicine just a profession, it is only healing that has stayed as an art. Experience is the form which brings this art into the surface. This might be questioned as we, doctors, are students of science, but we deal with humans and human emotions, and in that experience is our only beacon.

Experience in medicine dates back to the times immemorial and is the root of evolution of medicine, while evidence is

If medicine was to be practiced only by experience with no evidence behind it, it will reduce to something no better than 'Dadi maa ke nuskhe'.

Experience is something what we presume is correct, sometimes our opinions being biased in favour of what results we expect but at times the truth turns out to be something else. We almost invariably arrive at beliefs not on the basis of proof but on the basis of what we find attractive specially if the results are subjective and cannot be quantified.

But by evidence we can exactly know about the population or person choosen, the intervention given and compare different modalities for any significant difference. It is not restricted to randomised trials and meta-analyses but tracks down the best external evidence with which to answer our clinical questions to avoid getting mislead. It can be stored, retrieved when required and the results can be reproduced by different practitioners across the globe keeping in view the clinical setting without hesitation as it is a proper documentation of facts, figures and results and not just what someone has presumed might work or something that someone has tried in a patient or two and had for him.

Some refute evidence saying everyone is doing this from experience and so should I. But we should remember that wrong is wrong even if everyone is doing it and the the hunger to learn what is right and to practice it even if no one is doing it is important. Relying only on experience and relatively new. Evidence though has accelerated medicine to a place like never before; experience is still the vehicle where it sits, we physicians being the drivers. Once we eliminate role of experience in practicing medicine, everything will just become a mathematical question, the internet will have an answer to, and we physicians will have no role. But are we ready for that, is this picture pleasant?

Humans are subjects and not objects and hence subjective thinking and judgment is essential in execution of a management plan. We are neither computer hardware nor machines where protocol can be applied and results will be yielded in the same manner every time. 'Placebo-effect' in itself shows unpredictability of human response.

Experience is something which is tangible by the patient. A physician's experience is his own which can be trusted. Somebody somewhere conducted a study on some patients and had some results. Only a physician's experience can validate this jargon for a patient and bring this evidence into practice and meaningful outcome. What a physician has experienced is what provides a seed for evidence to grow on to. But, on the other hand Evidence based medicine denigrates experience. Clinical case reports and experience are considered the lowest form of evidence.

Moreover, EBM discourages logical thinking. Every disease has a pathophysiological mechanism which leads to research and development of new drugs

not searching for evidence is like trusting half truth, and we all know half truth is even more dangerous than lies.

EBM allows the clinicians round the globe to share their outcomes, knowing the exact protocols, study population and clinical scenario so that they can be brought into practice instead of being confined to a group of learned men sharing there experiences with no authentication. It opens gate for further research by stimulating curious minds to think logically and develop newer medications based on areas left unexplored following a step by step protocol as humans are not guineapigs in whom you can try new ideas without any evidence behind and gain experience.

Some consider it impossible to practice or something that can be practiced only by the young as old have grown grey with experience but practicing evidence is an art and you are never too young or old to learn an art, never too workedout to not spare a few minutes to look into what you are practicing, is it validated by evidence and is there something more to offer. Evidence based medicine is not "cookbook" medicine or an algorithm to be followed . It requires the clinicians to aquire some basic new skills like efficient literature searching, and the application of formal rules of evidence in evaluating the clinical literature. It is important to acquire the evidence, then appraise it and to then finally apply it to practice in best interest of the patient.

Good doctors always integrates the best available external evidence with and interventions and drives a treatment modality. It's the logic that provides light and is tested by experience. Evidence believes in mere numbers. Too much reliance of evidence will hamper future scope of innovation and experimentation in medicine. In the end, we might develop a breed of physicians who have all the numbers in the world but lack intuitive and innovative thinking which is the essence of being a good physician.

Also, we need to ask, how much trust we can actually lay on EBM in the light of various loopholes. One, publication bias, two, competition on number of publications which is taken as an indicator of an individual's progress and academic success can lead to doctoring of results, three, influence of pharmaceutical companies on promoting or demoting a product which is reflected in the funding of the trials. In such a situation, the only savior is experience, which is untainted and undaunted.

Randomized control trials (RCTs) which have been considered highest form of evidence after metanalysis have been imprecise, inconsistent at various occasions. Various studies conflict the results of each other on same parameter. Not only this, evidence against something can be tipped to the other side in light of some other more influential study. This leaves clinicians confused as to what to follow. Also the generalizations posed by these studies cannot be necessarily extrapolated to all the populations around the world. RCTs are not an answer to everything . If we talk about Dermatology,

individual clinical expertise .Without current best evidence, practice risks becoming out dated, to the detriment of patients.

Despite its ancient origins, evidence based medicine remains a relatively young discipline whose positive impacts are just beginning to be validated and it will continue to evolve.

I firmly believe that medicine is incomplete without evidence as with passing years, experience dies but evidence remains and grows stronger.

the branch itself is a relatively younger branch where evidence is just building up, on the previous experiences of physicians. To emphasize this point Dapsone, which though lacks meaningful evidence on its effectiveness in Lichen Planus, has been found effective in clinical experience. The converse is also true, an RCT comparing 20% Azelaic acid and 4% Hydroquinone in melasma shows greater effectiveness of Azelaic Acid, which many clinicians won't agree to based on their experience.

Any physician, in the best interest of the patient requires experience both his and of others which can be provided by EBM. But for the best interests of medicine it is indispensable for him to contribute to the evidence and apply the evidence onto his patient benefitting him and further, the medical literature. Clinical Research, pathophysiologic rationale and personal experience are to be integrated in practicing medicine. Our ultimate promise is to a better life.

For me who is an ardent believer that not everything can be done and explained by science. Experience leaves space for miracles and hope. And, “Hope is a good thing, maybe the best of things, and no good thing ever dies”.

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EXPERIENCE WITH SECUKINUMAB IN PSORIASIS

INTRODUCTION

Psoriasis is a chronic inflammatory disease that can result in significant physical, psychological and quality of life impairments. It affects around 25 million people worldwide with India constituting more than 20% of this global disease burden. A T-helper cell mediated, Type 1 immunological disease, it goes more than 'skin deep' and evokes a state of systemic inflammation.

CONCEPT OF 'PSORIATIC MARCH'

PSORIASIS – SYSTEMIC INFLAMATION – INSULIN RESISTANCE – ENDOTHELIAL DYSFUNCTION – ATHEROSCLEROSIS – MYOCARDIAL INFARCTION

Most of the conventional treatment modalities for psoriasis provide only temporary relief and are riddled with potential toxicities. This results in high rates of treatment dissatisfaction among patients (>50% as per NPF reports). Introduction of 'biologicals' as a therapeutic option has revolutionized the treatment of psoriasis. Until recently, biologic treatment was limited to tumour necrosis factor inhibitor TNF-α inhibitors (infliximab, etanercept and adalimumab) and an IL-12/IL-23 antagonist (ustekinumab). Newly developed biologics targeting pro-inflammatory 1L-17A cytokine have shown success with higher levels of clinical efficacy in patients of psoriasis.

SECUKINUMAB

Secukinumab is recombinant, high affinity, fully human monoclonal antibody of the IgG1/kappa isotype that selectively targets IL-17A.

MECHANISM OF ACTION

In psoriatic skin, IL-17A is produced by infiltrating Th-17 cells, neutrophils and mast cells. This IL-17A along with other inflammatory cytokines that synergize with it, leads to further recruitment and activation of neutrophils, lymphocytes and myeloid cells, eventually leading to a sustained local cutaneous inflammation. This leads to activation of keratinocytes with subsequent psoriatic epidermal

changes like acanthosis, hyperkeratosis and parakeratosis. Secukinumab interferes by selectively binding to IL17A and preventing its interaction with its' receptors on keratinocytes.

INDICATIONS

- Secukinumab is FDA approved as first line treatment of moderate-to-severe plaque psoriasis in adults
- Completed Phase III trials and awaiting FDA approval for use in rheumatoid and psoriatic arthritis

We have used secukinumab marketed by Novartis pharmaceuticals under brand name of SCAPHO. It is available as white solid lyophilisate powder. Each vial of powder contains 150 mg of secukinumab and requires to be reconstituted with 1 ml of water for injection.

The patients who were selected for secukinumab were all adult patients >18 yrs of age, suffering from chronic plaque type psoriasis with body surface involvement >10%. Most of the patients had history of prior treatment with systemic therapeutics mostly methotrexate pulse regimen.

Efficacy endpoints used to evaluate response were Psoriasis Area and Severity Index (PASI) and Dermatology life quality index (DLQI).

At the start of therapy, all the patients had PASI >20 with average PASI score of patients ranging between 35-40.

We administered 300 mg of secukinumab by subcutaneous injection with initial dosing at weeks 0, 1, 2 and 3, followed by monthly maintenance dosing starting at week 4 (as recommended) for an average duration of six months.

At the end of week 4, >90% patients had symptomatic improvement in form of relief in itching. None of the patients reported appearance of new lesions and few patients even reported minimal decrement in size of the lesions. By the end of week 8, most of the patients were experiencing regression in the disease and reporting appreciable decrement in size of the plaques. After week 12, >75% patients had around 50% reduction from their respective baseline PASI scores. Also, the number of patients with DLQI score of 0 or 1, indicating no impairment of health related quality of life was >75%. By the end of the 6 months regimen, almost all the patients had 90% improvement in PASI from their baseline values with a considerable number of patients reporting almost clear skin as well.

The most frequently reported adverse drug reaction to secukinumab in clinical trials is upper respiratory tract infections (URTI), and in concordance we also encountered rhinitis and nasopharyngitis as the most common adverse reactions in our patients, albeit at very low frequency (<2%). No hypersensitivity reaction was seen in any patient.

The patients were followed up for 1 year after completion of their six months therapy. Around half of the patients treated with secukinumab experienced relapse with most of the patients having their first episode of recurrence, around 7 months after

discontinuation of therapy. The severity of repeat episode however was much milder, both in terms of symptomatology as well as extent of lesions/ body surface involvement, as compared to their initial episodes. Also these lesions responded well and could be contained by mid potent topical steroid preparations and emollients.

CONCLUSION

Targeted biologic therapies have remarkably improved the treatment of moderate to severe plaque psoriasis. The threshold for treatment success has now changed and achieving clear or almost clear skin with >90% improvement in baseline PASI scores is most desirable and relevant. The author has had experience with TNF-α inhibitor Etanercept as well. However, not only was the median time to 50% reduction to mean PASI score significantly shorter with secukinumab, it was also possible to achieve clear skin in a considerable number of patients.

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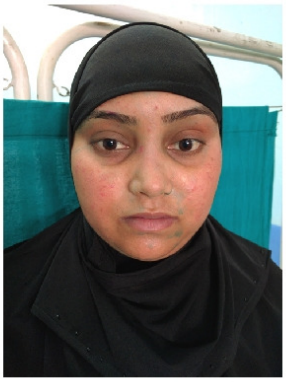
HOLI DERMATOSES: RANG BARSE

Holi is a spring festival, also known as the festival of colours celebrated on the Phalguna Purnima (Full Moon). The festival signifies the arrival of spring, end of winter. In 17th century literature, it was identified as a festival that celebrated agriculture, commemorated good spring harvests and the fertile land. Hindus believe it is a time of enjoying spring's abundant colours and saying farewell to winter.

On the day of Holi, people gather together and celebrate by applying colors in different forms on family and friends. Originally, the bright flowers plants which had medicinal properties were used to make the holi colors but over the years, natural colours have been replaced by synthetic colours to the extent that most Holi colours sold in the market are oxidized metals or industrial dyes. All these are toxic and can result in anything from skin allergies to cancer, eye irritation to blindness... and much more. When washed, they enter our water and soil, and cause even more pollution. Some of the common colors used during holi celebrations come in different forms such as pastes, powders, and watercolors. Some of the common colors and their ingredients are black (lead oxide), green (copper sulfate and malachite green), silver (aluminium bromide), blue(Prussian blue)and red(mercury sulfate).[1]


These chemicals result to various symptoms of which Some of the common ones found in a study done by Ghosh et al include:

- Itching, stinging, irritation and a sensation of burning of the skin as the most common symptom followed by inflammation (pain, redness), crusting and oozing of fluid, exfoliation, eczematous lesions including xerosis and scaling, erosions, erythema, urticarial, abrasions due to excessive rubbing to remove the colours
- Acute nail fold infections
- Pre-existing dermatoses are exacerbated like patients of acne, eczema, chronic paronychia. Lesions may get complicated with secondary pyoderma.
- Ocular complaints may be seen like redness, watering and grittiness.[1] Various other ocular problems are associated including conjunctivitis, corneal abrasions, and periorbital necrotizing fasciitis have been described to occur due to contact with Holi colors.[2-4]

Sites : face, dorsum of hands, palms, scalp, arms, forearms and trunk.

Mechanism : tissue injury caused by chemical agents leads to :

1. Capillary widening leading to increased blood flow
2. Increased capillary permeability leading to release of fluid
3. Attraction of white blood cells leading to migration of white blood cells to injury, thus leading to inflammation, redness, tenderness, swelling and pain

Signs : Common Signs of holi dermatoses are either due to the application of various colors during celebrating holi or methods used to remove colors once the celebrations are over.

They include:

- Allergic contact dermatitis
- Irritant contact dermatitis
- Erosions and erythematous lesions
- Acquired ichthyosis
- Acute contact urticaria

- Acneiform eruptions
- Acute paronychia
- Exacerbation of atopic dermatitis, seborrhoeic dermatitis
- Secondary impetiginisation
- Lacrimation
- Dryness, and gritty feeling in the eyes

Prevention methods :

- Avoid facials, waxing, threading etc 10 days prior to Holi
- Application of olive oil all over the body and hair 2-3 hours prior to Holi celebrations
- Apply Vaseline over the nail folds
- Wear protective clothing (full-sleeved clothes, water proof garments and scarfs)
- Remove colours immediately after Holi
- Shampoo the hair, followed by plenty of conditioning
- Use of natural colours
- Increase public awareness regarding the health hazards of harmful colours
- Consult a dermatologist immediately, in case of development of any skin problems

Celebration of Holi, is thus associated with many cutaneous problems. The colors are openly sold which contain harmful chemicals and even packed colors don't give the consumers the right amount of information regarding the ingredients of the colors resulting into various hazards, many organizations have taken up this issue to prevent people from being harmed by such hazards. There is a clear need for strict vigilance of these colors being made in factories along with production of natural colors which provide benefits to the skin rather than harming it.

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Author

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MAAN KI BAAT WITH TRILOKRAJ TEJASVI

Sir, Dr Trilokraj Tejasvi is a big name in the world of dermatology now. Please describe your journey from your days of residency. How were you formally introduced into Dermatology?

As any other medical graduate, I wanted to follow footsteps of successful seniors. This brought me to AIIMS, New Delhi. On the first day I was introduced to **" Hyperkeratosis Follicularis et Parafollicularis in Cutem Penetrans"**, I was like what the...? In fact, that terminology kept haunting me all the three years, it was as a spotter for my final exam. I had the last laugh when I nailed the diagnosis in my exam. Senior residency was significant with scholarly activities, Text books, few case reports and original articles and couple of trips out of country to attend International conferences. Life has both ups and downs, I failed to make it into AIIMS as a faculty. I was heartbroken, but when one door closes the other door opens. The real journey into research world started with Dr. James T. Elder from University of Michigan, who hired me to work as research fellow in the psoriasis genetics laboratory, from then on there was no looking back, I stayed on to become a faculty.

Can you share a few interesting incidents (with patients and with fellow colleague) in your outstanding career?

Although, I was proficient in Hindi, there were some terms which was new, In the allergy clinic, I never understood why some body with airborne contact dermatitis goes to JUNGLE every day? Collect fire wood, that was my answer to one of the attending, the attending had their laugh of the day probably!

What do you feel about the current scenario of Clinical dermatology in India?

The current scenario for clinical dermatology in India is amazing, the breadth of the cases which each resident gets to see during their time is priceless!!

A pubmed search using the keywords "Trilokraj Tejasvi" and the results are mind-boggling. What advice would you like to give to young dermatologists, who are in the early phase of their career? What is the role of publications and how to go ahead?

Start with case reports, graduate to case series and finally start working on original articles. Choose your journal before you publish your work, for example it is better to publish your work on Leprosy in Indian Journal of Leprosy than publishing it in Skin Therapy Letter, although the latter is an international journal.

Sir, you have done a lot of work on the genetics of psoriasis. Kindly enlighten us about the must know points regarding the inheritance pattern and genetic susceptibility of psoriasis?

I was associated with amazing team science; the team was associated with 5 nature publications. The inheritance pattern is still multifactorial; genetics do play role in psoriasis. HLA.Cw6 is still the locus with the strongest association with psoriasis, especially with guttate psoriasis. We have identified 41 loci which are involved with both adaptive and innate immunity. The other important loci are IL12B, IL23A (monoclonal antibodies developed against these gene clear psoriasis – ustekinumab (IL23p40 antibody) and guselkumab (IL23p19 antibody).

Teledermatology is another field which you seem to be interested in. What is the scope of this field in India?

There should be always a plan B, especially in academia, teledermatology started between two PCR plates, as a clinician I always wanted to keep in touch with patient care even in the lab. Technology has connected people and it will help us deliver better health care, for example you could have experts connecting from different parts of the country or world to help our patients. There is a great opportunity in India, India is possibly the largest consumer of mobile market, you could reach a larger patient base, also you could take care of underprivileged patients virtually, especially those living in remote areas with no basic health care. You could also use this technology to educate other physicians about common dermatology conditions.

Can you tell us something about the environment at University of Michigan, where you work? What is the difference from the working environment in Indian colleges?

"Saara time angreze main baath karna padtha hain! OPD ke beech tiger biscut aur lipton ka chai nahin miltha hain, yehi difference hain."

How was your experience at Pigmentarycon, New Delhi 2016?

It was amazing!..It was Déjà vu, I need to thank Dr. Rashmi for this, it would not have happened if she would not have invited me.

Sir, you have been spotted during the Quiz for postgraduates during Pigmentarycon. Thank God, you were not participating, the questions seemed to be like "baaye haath ka khel" for you. You won the maximum number of chocolates. What is the secret behind your remembering so much academic stuffs?

"Koi Baaye haath ka khel nahin tha, Biju haath ka khel tha"

Are there any fellowships or training programmes for young dermatologists, in your university? How to apply for the same?

There are fellowship programs, but all of them are offered to residents who are US board eligible or board certified dermatologists.

Yours final words of wisdom for
- Infants in Dermatology (1st year Residents)
- Children (2nd year Residents and exam going PGs)
- The derms in the most puzzling phase of their lives, the recent passouts

(Private practice /academics/research/fellowships)

Does not matter if you're an infant or confused athma.. If you do not enjoy what you are doing, then do not do it, does not matter if you are in academia or in practice! and finally ...chance pe dance!!

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EXPERIENCES IN AAD 74TH ANNUAL MEETING SCHOLARSHIP 2016

My participation in the American Academy of Dermatology Annual Meeting 2016 was an unforgettable experience and it is my pleasure to write down my experience in ResiDream about the AAD scholarship and conference. This year AAD Annual Meeting was held in Washington DC, March 3-8.

I came to know about the scholarship through a mail sent by my professor Dr. Nilay Kanti Das. I am really grateful to him. Residents or dermatologist within three years of completing dermatology residency can apply. All the details are given in their website. Applicants need to apply through IADVL with their crisp resume and abstract. Selected candidates will get an endorsement letter from IADVL and applicants need to submit that to AAD along with their application. Candidates can send their abstract to AAD separately for e-poster presentation. IADVL selected four candidates for 2016 AAD scholarships.

Final selection by AAD was announced in September 2015. The AAD scholarships cover registration for the conference, one day course at no charge and a grant of USD 1000-2000.

The conference started with a grand reception and dinner for the scholarship recipients. Around 120 scholars from all over the world and some eminent dermatologists were invited for the reception function. It was really a memorable night for me. I still cherish the moment when my name was announced as a scholarship recipient-Dipti Das, India. It was truly a great experience and honour.

The entire conference was well organized and professional. I was blown away by how big it was! I met so many wonderful people. I was able to gain a wealth of knowledge from the sessions I attended and will bring that knowledge back to my practice.

Finishing the event, I also visited few places of Washington DC and New York. DC has historical and political importance. It is truly a beautiful city. I thoroughly enjoyed my trip and it was well worth my time!

This was one of the greatest educational opportunities, as well as, providing networking with peers and leaders in dermatology; one of them was Dr. Jean Bolognia.

I came back more motivated, more confident, and more competent!

[AAD 2017 annual meeting will be held March 3-7 in Orlando, Florida]

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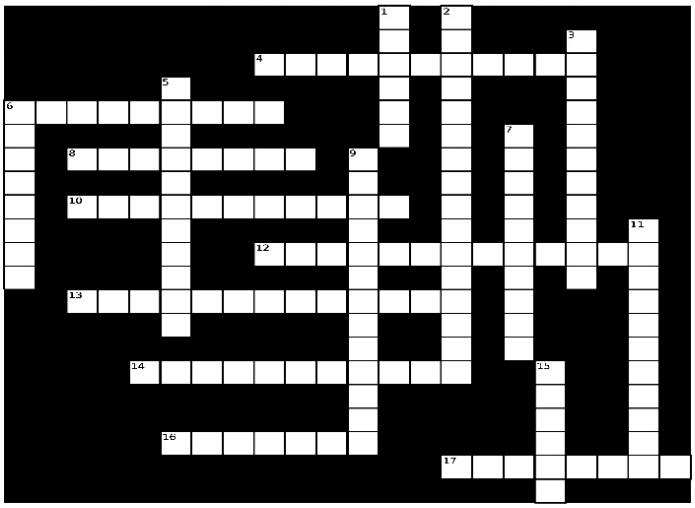
DERMCROSS

Major Pankaj Das, Col Rajesh Verma

Residream DermCross Series. Crossword Puzzle 1



Across

4 Specific stain for capsule of Cryptococossis
6 Antibiotic derived from Pseudomonas fluorescence
8 This filler was FDA approved in 2015, for volume-loss over dorsa of hands
10 A fungal infection common to humans and bottle nosed dolphins, endemic in South and Central America
12 Biguanide agent used for hand scrub
13 Characteristic "Shadow" or "Ghost cells" in histopathology are a characteristic feature of
14 Recombinant human platelet-derived growth factor used in diabetic foot ulcers
16 Post-Fumigation, the Formaldehyde vapour is neutralized with this agent
17 Derived from brown sugar, this peeling agent is preferred for peri-orbital hypermelanosis

Down

1 Di-methyl Glyoxime test is used for this allergen
2 This topical agent is used in R-0 technique for Tattoo removal
3 It's mutation causes Sub-Corneal Pustular Dermatosis
5 Initially developed as an anaesthetic, later used as a sclerosant
6 Polyglecaprone-25 is popularly known as
7 Selective PDE-4 inhibitor, only oral biologic FDA approved for moderate to severe plaque psoriasis
9 Mikulicz Cells are seen in this disease
11 FDA approved in 2007, a pleuromutilin class of topical antibiotic derived from edible mushroom Clitopilus scyphoides
15 Vitamin 'H'

The answers to this crossword will be published in the next issue of ResiDREAM. Residents may send their answers to anupamdasdr@gmail.com. Kindly mention your name, affiliation and IADVL membership number while sending your answers.

1. 13th EADV Spring Symposium, 19th - 22nd May 2016 (Athens, Greece)
2. National symposium on clinical Dermatology and bedside investigations, 11th & 12th June 2016 (NIMHANS, Bangalore)
3. DAAS Summit, 1st - 3rd July 2016 (New Delhi)
4. DERMAZONE North 2016 July 15 -17, 2016, Chandigarh
5. AAD Summer meeting, 28th - 31st July 2016 (Boston)
6. International Congress of Tropical Dermatology, 11th - 14th August 2016 (Colombo, Srilanka)
7. MID DERMACON 2016, 13th - 14th August 2016 (Bhubaneswar)
8. CDSI Conference, 25th - 28th August (Mumbai)
9. Indian Society For Pediatric Dermatology Annual Conference, 26th - 28th August 2016 (Hyderabad)
10. ONY CHOCON, 2nd - 3rd September (Srinagar)
11. 25th EADV Congress, 28th Sept - 2nd Oct 2016 (Vienna, Austria)
12. DERMAZONE South 2016 Oct 7 - 9, 2016 Trichy
13. Asian Dermatological Congress 2016 Oct 13 - 16, 2016, Mumbai, India
14. 5th Annual Congress of Dermatologic Aesthetic Surgery International League Oct 19 - 23, 2016, Dubai, United Arab Emirates
15. International Conference of Dermatology, 20th - 22nd Oct (Kathmandu)
16. Annual Conference of the Dermatopathology Society of India, 11th - 13th Nov 2016 (PGIMER Chandigarh)
17. DERMAZONE East 2016 Nov 18 - 20, 2016, Bodh Gaya, Bihar
18. 45th National Conference of Indian Association of Dermatologists, Venereologists & Leprologists (IADVL), DERMACON : 12th - 15th January 2017 (Kolkata)

Trip Down The Memory Lane....

FLASHBACK


Pigmentary Disorders Society (PDS)
PIGMENTARYCON
Dubai Derma 2016