



**“Be the change you want to  
see in the world”**

**Proceedings of IAL Mid-Term Conference,  
Hyderabad  
April 10 and 11, 2015**

## CONFERENCE REPORT

The Midterm conference of the Indian Association of Leprologists was held at Gandhi Medical College, Hyderabad on the 11th and 12th of April, 2015 and was hosted by the Department of Dermatology, Venereology & Leprosy. Over 230 delegates registered for the conference and this included about 120 postgraduate students, mainly from Dermatology; and leprologists from all over the country and overseas. The theme of the Conference was “New challenges and strategies in changing scenario of leprosy”.

A CME on leprosy was conducted on day 1 and was inaugurated by Dr VM Katoch, Former Secretary for Health Research & Director General, ICMR who set the tone for the conference with the keynote address on the theme of the conference. Other key dignitaries to light the lamp were two senior dermatologists from Hyderabad, Prof TSS Lakshmi & Prof Patnaik and the President of the IAL Prof Swapan Samanta, Secretary Prof Rathin Dutta, Dr Kiran Katoch, Past President IAL and Prof Geeta Kiran, Chairman and host for the conference.

In the keynote talk Dr VM Katoch said that the elimination of leprosy as a public health problem in India has been one of the important success stories of modern times with more than 95% decline in number of leprosy cases. However, he said that the progress has been very slow and virtually stagnation is seen during the last ten years with pockets of endemicity still present in several parts of the country, an alarming rise in deformities and persisting high child rates showing continued transmission. He went on to outline different measures that can be taken to address this, including microplanning based on the ground realities; participation of state health services, NGOs, medical colleges and research

institutions in this endeavor; additional measures like chemoprophylaxis, immunoprophylaxis (MIP/BCG) or both; and the use of modified regimens like U-MDT.

The topics for the CME covered Challenges in epidemiology, diagnosis, lepra reactions, therapy, prevention of disability and rehabilitation. Foreign faculty included - Dr Ben Naafs (The Netherlands), Dr Terence Ryan (UK), Prof. Diana Lockwood (UK), Mr Robert Jerskey (USA) and Dr Paul Saunderson (USA). National faculty included Prof Bhushan Kumar, Dr Kiran Katoch, Dr Sunil Dogra, Dr Tarun Narang, Dr Vitthal Jadhav, Dr Vivek V Pai, Dr Vanaja Shetty, Dr Utpal Sengupta and Dr UD Gupta.

Dr Paul Saunderson, in his talk 'Epidemiology of leprosy – new challenges' clearly identified the major challenges in the epidemiology of leprosy. He said that there are new concerns about possible environmental reservoirs as sources for continued transmission. He discussed the issue of the very long incubation period of leprosy as a good explanation for the epidemiological patterns that we observe and that this should influence our thinking about leprosy control, focusing more on long-term sustainable interventions such as contact examination, and less on short-term special efforts, such as one-off surveys.

The increasing numbers of Child cases in the country was mentioned by Dr VM Katoch and this was further highlighted and presented by Dr Sunil Dogra in his talk 'Childhood leprosy: evolving scenario & implications'. He said that even in the post elimination era, the percentage of childhood cases among the newly detected leprosy patients per year in India remained nearly unchanged (range 9.42 – 10.14%) implying continued disease

transmission in the country. He also discussed the feasibility of routine provision of prophylaxis (chemo- or immune- or both) for healthy children in households of each newly diagnosed adult leprosy case.

In his talk on 'Clinicians perspective in changing scenario in Leprosy' Dr Vitthal Jadhav spoke of the key role of Dermatologists in the context of integration of leprosy and the paramount importance of training. He touched upon the issues of reactions and relapse, newer drugs to treat it, chemoprophylaxis of contacts, and the use of UMDT.

Prof Bhushan Kumar spoke on the 'Challenges in the management of leprosy from a Dermatologists perspective'. He said that in the context of integration Dermatologists carry the responsibility of wiping out the remaining cases scattered in the country. Some of the emerging issues he highlighted were -criteria for diagnosis of new cases, classification, duration of MDT, dosage and duration of steroids for treatment of reactions, training of health care workers, screening tools to detect sub-clinical infection, and predicting lepra reactions.

In the sessions focused on the treatment of leprosy Dr VV Pai spoke on 'Chemotherapy of Leprosy – Key Challenges' in which he said that although MDT has been successful in bringing down the prevalence there are many issues that need to be managed post MDT. These include relapses, persistence of skin lesions, late reversal reaction, neuritis, new nerve damage and disabilities. He also touched upon the biological factors influencing relapse, the role of persisters and the need for newer drugs to achieve quicker cure and bacterial clearance.

Dr Tarun Narang in his talk entitled 'MDT efficacy in multibacillary leprosy: A clinicians' perspective & controversies' said that multi drug therapy (MDT)

has been the backbone of the leprosy elimination campaign and modifications have been made to MDT to provide ease, simplification and reduction in operational requirements. He mentioned some of them like redefinition of a leprosy case, modification in leprosy classification, shortened duration of multibacillary (MB) treatment, integration, U-MDT and A-MDT. He mentioned that after completion of MDT there is a subset of MB patients with a high bacterial burden who are at risk for relapse. He also mentioned that there has not been any significant breakthroughs on the treatment front like new drugs, vaccines, immunomodulators that can replace MDT. Our priority becomes to treat/cure leprosy patients early and effectively with minimal side effects and with no relapses.

Dr Kiran Katoch spoke on the important topic of 'The management of post RFT reaction, reactivation & relapse in leprosy' in which she said that reactions, relapses and deformities are being reported even after RFT. She said that even though there are laid down guidelines for treatment of these but several times the results are not optimum. Quite often these also lead to deformities and resulting lifelong morbidity and there is a need to devise methods for early detection and treatment of these post RFT phenomenon and prevent the occurrence of deformities.

Prof Diana Lockwood addressed the issue of neuropathic pain in her talk entitled 'The challenge of neuropathic pain in leprosy'. She said that "Pain in leprosy is often nociceptive and associated with inflammation and can be present before, during and after treatment. She defined neuropathic (NP) as spontaneous pain in the absence of noxious stimuli and in areas of sensory loss, and Allodynia- which is pain in response to stimulus which does not normally provoke pain. She also discussed scales to measure neuropathic

pain like the DN4 questionnaire and brief pain inventory (BPI). She concluded that trials are needed of interventions for treating neuropathic pain.

On the topic of Relapse, Dr Vanaja Shetty in her research talk entitled 'Occurrence of relapse in a cohort of 577 leprosy patients released from treatment (RFT) between April 2005 and March 2010 from the public health facilities in parts of Maharashtra, India- A 3 year active follow up study' presented data from 6 Public Health Centre's (PHC) where out of 577 RFT patients followed up 104 of them (18%) had 'events' that includes neuritis, relapse and reaction. She concluded that it would be incorrect to conclude that in MDT treated cases the risk of relapse is negligible.

Dr Utpal Sengupta spoke on 'Emergence of Rifampicin Resistance identified by rpoB Gene Mutations in *Mycobacterium leprae* from Relapsed Leprosy Patients' where he presented data from clinically relapsed patients analyzing the DNA sequences of particular regions of folP1, rpoB, and gyrA, which are responsible for resistance to dapson, rifampin, and fluoroquinolones, respectively. Several *M. leprae* isolates showed point mutations in the genes. These results, he said suggest the emergence of ug resistant *M. leprae*.

Prof Ben Naafs spoke on 'The challenge to understand nerve damage in leprosy'. He said that nerve damage may occur with pain or without pain, the latter relatively unnoticed as silent nerve damage. Occasionally, he said there may be neuropathic pain without further noticeable damage. Talking about the pathogenic mechanisms involved, he said that the inflammation in the nerve results in oedema and entrapment leading to demyelination and/or a conduction block. The intraneural flow may stop and the blood flow diminishes leading to neural cell death. Even if the immunological inflammation

subsides the pressure and entrapment inside the nerve may continue and at the end only a fibrotic scarred nerve will remain, with occasionally neuropathic pains."

Mr Robert Jerskey was a key speaker on the topic of prevention of disability and in his talk entitled 'Touchstones for prevention of disability in leprosy: full circle...a pragmatic approach for the clinician' in which he talked of 'full circle' as a symbolic of equality, where no person is more prominent than any other person. -- Native American Indian Wisdom. He touched on select P.O.D. topics in the field of leprosy which included - The value of a multi-sensory approach in the clinic/field so as to not miss "hidden impairments" that underlie disability; use of monofilaments [MF] and the challenge in identifying and monitoring those with impaired sensation and loss of protective sensation; and a re-appraisal of the W.H.O. Disability Grading System.

Dr UD Gupta spoke on 'The role of vaccines in leprosy' in which he said that during the last century, a sizable number of mycobacterial and non-mycobacterial preparations have been tried as immunomodulators against leprosy. He then outlined the following agents which have been tried include Mycobacteria such as, Bacille Calmette-Guerin (BCG), BCG+ killed *M. leprae*, *Mycobacterium indicus pranii* – MIP (Mw), the ICRC bacillus, *M. habana*, *M. vaccae*, *M. goodii* etc., cell wall fractions of *M. leprae*, acetoacetylated *M. leprae*, purified antigens and number of immunomodulators like transfer factor, interferon-gamma, interleukin-2 and levamisole."

After the completion of the CME, the Director of Medical Education, Prof Putta Srinivas inaugurated the Main Conference and in his keynote reviewed his own experiences with leprosy as a dermatologist. Other key dignitaries present were

the President and Secretary of IAL, Vice Principal of Gandhi Medical College and Dr VM Katoch.

Day 2 consisted of Scientific Sessions with a lead invited speaker (Refer Abstracts) followed by free papers. It was heartening to see over 45 research presentations from young postgraduate students and leprosy workers from all over the country and ranged from prospective studies, laboratory studies, case series and individual case studies (Refer Abstracts).

The final session was of 7 papers shortlisted for the Best Paper Award, which was shared by two presenters, Dr Itu Singh for her paper entitled "Molecular mimicry between *M. leprae* and host proteins' and Mr Pankaj Gupta for his paper entitled "Peripheral nerve function assessment with monofilaments in busy urban clinical set up: A field experience." The second prize was given to Dr Bhavya Sindhu for her paper entitled "Atypical presentations of Hansen's disease".

Interspersed over the two days were well moderated Panel Discussions on key topics of challenge in the subcontinent - "Management of leprosy in high endemic pockets/districts" moderated by Dr VM Katoch; "Is one year MB MDT sufficient for all forms of leprosy?" moderated by Prof P Narasimha Rao; "People living with leprosy: needs, priorities & challenges" moderated by Dr Subbanna; "Management of

steroid dependent ENL" moderated by Dr Kiran Katoch; and "Promoting leprosy research in dermatology departments" moderated by Prof Bhushan Kumar. The panelists included people affected by leprosy, representatives from the State Government leprosy programmes, NLEP, WHO, representatives from NGO's and other key stake holders. The panel discussions were interesting and members of the audience also expressed their views.

A 'Quiz on leprosy' was conducted by the Dept. of DVL in partnership with the SIG on leprosy of IADVL. Four teams qualified for the finals and participated enthusiastically in the well conducted session. The winners and runners up received a copy of the IAL Text Book on leprosy and a cash prize from Dr Vivek V Pai, Coordinator of the SIG on Leprosy of IADVL.

#### **Life Time Achievement Awards**

Dr VV Dongre, Dr Atul Shah and Dr Utpal Sengupta were conferred 'Life time achievement award for leprosy' for their outstanding contributions by the Indian Association of Leprologists at a special award ceremony during the conference.

The CME cum conference was supported by the ICMR, SERB, Lepra Society, The Leprosy Mission and GLRA. The AP Medical Council granted 4 Credit points for all the participants and also supported the CME.

**P. NARASIMHA RAO**

ORGANISING SECRETARY

&

**SUJAI SUNEETHA**

CHAIRMAN SCIENTIFIC COMMITTEE