

of availability-based tariff (ABT) implemented in the country in order to address a large number of issues and the achievements thereof. He also emphasized on the further work required to be carried out in the electricity sector, including linking of incentives to thermal generation with plant availability instead of plant load factor, rationalization of tariff structure in respect of hydro plants, payment security for unscheduled interchanges and implementation of intra-State ABT, etc.

S. K. Soonee (POWERGRID) made a presentation on 'Grid operation and control – Issues, concerns and expectations'. He outlined the growth story in the Indian power sector in the fields of generation, transmission and interconnection, the modernization at the control centres, evolving power market and the main concerns faced by the sector as a whole. He also discussed the issues related with power system reliability, impact of unforeseen inclement weather conditions and associated factors on the grid, tools for visualization and situational awareness for grid operation, and also about the balancing market in the electricity industry.

In the session on 'Grid security: Issues and avenues', R. Nagaraja (Power Research & Development Consultants Pvt Ltd, Bangalore) discussed the electric grid and the need for creation of intelligent grid. The performance metrics associated with the integrated grid are

reliability, power quality, security, economy, environmental impacts, efficiency and sustainability. He highlighted the two specific metrics, viz. grid security and economy in detail. In his presentation, Sethuraman Ganesan (ABB Ltd, Bangalore) elaborated on the importance of the Wide Area Monitoring (WAM) system in real-time monitoring of the power system. Unlike estimation of the system state which was being done in the past, WAM results in better visibility and control of the system. He also stated that automatic high-speed control of the grid using WAM is an evolving model in many systems worldwide. M. M. Babu Narayanan (Central Power Research Institute, Bangalore) in his presentation addressed the issues involved in the secure operation of the power system and explored the application of some of the standard knowledge management techniques, such as knowledge portals, mentoring, etc., to enhance the performance of the system operators.

In a panel discussion, speakers in the various sessions discussed and responded to a variety of issues raised by the participants, ranging from grid security and control, open access in transmission, regulatory principles and the problems faced by them in following certain stipulations as contained in the Indian Electricity Grid Code and other such statutory documents. Some of the participants also brought to the attention of the panelists their experiences and difficulties in re-

spect of certain short-term open access cases they had applied in the recent past and their suggestions to amend the regulations to take care of such issues. A large number of questions were also raised relating to the existing tariff in the case of transmission/short term open access (STOA) and suggestions for their further rationalization. This workshop was planned mainly to spread more awareness and information amongst the power utilities, industry, regulatory and planning authorities, and the academic and research institutions about the grid security and management issues being faced by the power sector in today's context. These were deliberated in the workshop in detail, so that a message could be spread amongst a wider section of people about these specific issues and the action plans required to address the same. The workshop also gave a good opportunity to the participants to have an in-depth knowledge about the development of the intelligent grid comprising WAM systems, adoptive islanding and self-healing aspects, etc., in order to facilitate grid operation with safety, security and reliability.

**P. K. Shetty\***, School of Natural Sciences and Engineering, National Institute of Advanced Studies, Bangalore 560 012, India; **V. K. Agrawal**, Southern Regional Load Despatch Centre, POWERGRID, Bangalore 560 012, India.

\*e-mail: pkshetty17@gmail.com

## MEETING REPORT

### Hypospadias\*

Hypospadias is the second most common congenital anomaly in children. The urethral meatus is positioned either along the ventral shaft of the penis or on the scrotum or perineum instead of being located at the tip of the penis. This is a relatively common condition, occurring in about 1 of 150 live male births. In the more common and less severe forms of hypo-

spadias, the urethra is located at or distal to the corona of the penis; these conditions frequently do not necessitate treatment, except for cosmetic purposes. The less common but more severe forms of hypospadias, in which the meatus is located on the penile shaft or in the perineum, may interfere with normal urination in the usual male standing position and may, in adult life, interfere with fertility, because the semen is deposited in the distal vagina rather than at the cervix. Hypospadias is typically diagnosed postnatally at the time of delivery. With the

advent of prenatal ultrasound, it is now possible to identify the anomaly prenatally. Such cases are best corrected early in childhood to avoid social embarrassment and psychological trauma.

To reduce surgical complications and to look at the advances in surgical techniques and train paediatric urologists to meet the growing number of hypospadias surgeries, the KLES Kidney Foundation, Belgaum organized a live and video workshop on hypospadias. There were 94 participants from different healthcare institutes of India.

\*A report on the 'National Hypospadias workshop' held at KLES Dr Prabhakar Kore Hospital and MRC, Belgaum during 19–20 April 2008.

The workshop on hypospadias with live operations, operative videos and short discussions covering all related topics was held to develop better skills to identify and perform the surgery early in childhood (6 months to 1 year). It was of interest to urologists, paediatric surgeons and plastic surgeons as the incidence of hypospadias is increasing over the years. Hemanth Pathak (TN Medical College and BYL Nair Charitable Hospital, Mumbai) spoke on introduction to hypospadiology and general consideration and an overview of hypospadias management. According to Pathak, incidence of hypospadias is as high as 1 in 125 live male births. In the live video session, he showed the Snodgrass repair for distal hypospadias in a two-year-old child. In another video session, he showed preputial onlay for distal hypospadias following the Asopa Procedure in a 14-year-old child. Amilal Bhat (SP Medical College, Bikaner) spoke on Snodgrass repair for proximal hypospadias, preputial tube urethroplasty for proximal hypospadias, ra-

tional approach in management of chordee without hypospadias and hypospadias dressing and post-operative care. In the live video sessions, he showed various surgical techniques followed in hypospadias. The operations performed to correct hypospadias vary according to the degree of abnormality. The extra foreskin is sometimes needed to construct a new urethra. When the operation is completed, the extra skin is removed so the child will look circumcized. S. B. Mane (Department of Paediatric Surgery, JJ Hospital, Mumbai) spoke on 'Children with severe hypospadias – Evaluation for intersex, and hypospadias repair with preputioplasty'. R. B. Nerli (KLES Kidney Foundation) spoke on the use of testosterone prior to hypospadias repair. He also spoke on the psychological, social and sexual effects of hypospadias. Although it is relatively common, it is little discussed in the field of psychology. The current practice is to advise regarding operation early in childhood, in order to avoid emotional consequences due to

awareness of a congenital deficiency and the experience of a surgery. In the same context, it is now seen as important that the parents accompany the child during the pre- and post-operative processes. Another principle objective is to prepare the parents for the child's surgery, giving them information on surgical procedures, duration of hospitalization, possible complications and the required post-operative care. In the concluding session all the speakers discussed the etiology (hereditary, genetic, endocrinal and environmental factors) of hypospadias and their surgical correction experiences in hypospadias.

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**M. B. Hiremath and R. B. Nerli\***, Department of Urology, KLES Kidney Foundation, Belgaum 590 010, India.  
\*e-mail: director@kleskf.org

## MEETING REPORT

### Biodiversity, bioresources and biotechnology for sustainable livelihood of rural community\*

The conference was attended by more than 250 delegates from various research institutions and colleges. The Department of Biotechnology Natural Resource Awareness Club (DNA Club) members from Tamil Nadu also attended the conference.

S. Kannaiyan (National Biodiversity Authority) inaugurating the conference explained various types of biodiversity prevalent in our country and the different measures to be taken up by the National

Biodiversity Authority for protecting and conserving biodiversity. He stressed that our community needs more alternatives. He also discussed GM crops and their importance and stated that use of GM crops as an alternative for the country's food security was essential. M. A. Vijayalakshmi (VIT, Vellore) delivered a special lecture on biotechnology for pharmaceutical industry. She discussed recent advances and challenges, and stages of biopharmaceutical production.

In the first technical session, R. R. Rao delivered a lecture on 'Floristic diversity in India: Conservation and bioprospection'. He noted that classical biology is important for doing any advanced research. R. Govindarajan (NBRI, Lucknow) gave a lecture on the need for standardization of herbal drugs, with special emphasis on chromatographic techniques. He gave an idea about the chromatographic techniques used for the secondary metabolites isolation. P. Nammalwar Rajan (formerly at CMFRI) delivered a lecture on the present status of marine biotechnological research and development in India. He explained about the potential fields for biotechnological research in the areas of marine, biomedical, marine toxins, marine industrial chemicals, mariculture and marine bio-fouling. Rajalakshmi (MSSRF, Chennai) gave a lecture on bioresources in the Muthupet mangrove forest, Tamil Nadu. She explained the biotechnology option for enhancing nutrition security. She noted that improving or maintaining yield potential of crops under increased abiotic stresses will be a challenge for the future. The technical session concluded with a talk by Mary N. Mohankumar (IGCAR), who dwelt on the knowledge of the cytogenetic biomarkers for healthcare and envi-

\*A report on the National Conference on 'Biodiversity, Bioresources and Biotechnology for Sustainable Livelihood of Rural Community' organized by the Loyola Institute of Frontier Energy from 18 to 20 January 2008 at Loyola College, Chennai. The conference was supported by National Biodiversity Authority, CSIR, Department of Earth Science, BRNS, ICMR, DBT and ICAR.