



CAPE NEWS

Newsletter of the Indian Society for Pediatric & Adolescent Endocrinology (ISPAE)

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**BEST WISHES TO
ALL MEMBERS FOR
A WONDERFUL 2013!**

PEARLS FROM BALI

Tushar Godbole & Sachin Mittal

The 14th APPES Fellows School at Bali, Indonesia from 10th to 14th November 2012, was a great learning experience for all the 48 fellows. Five of us were from India-Tushar Godbole (Lucknow), Sachin Mittal (Mumbai), Rakesh Kumar (Chandigarh), Ram Kumar (New Delhi) and V Srinagesh (Hyderabad). We gathered several pearls, which we are happy to share with you, along with a complete report of the event.

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SECRETARY'S MESSAGE

Dear ISPAE members,

As my term as Secretary ISPAE draws to a close, I look back with satisfaction at the way the Society has continued to grow both in numbers as well as stature. Total membership now stands at 316, with 27 new members and three international members having joined in the current year. We have a good national representation, and a good mixture of pediatricians, pediatric endocrinologists and adult endocrinologists, from academic institutions and practice. We have...

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WEBSITE www.ispae.org.in
Must See ** Interactive
Discussion Forum

PEDICON 2013: 50th Annual IAP
Conference: Kolkata: 17-20
January 2013. Organizing
Secretary: Dr Jaydeep Choudhry.

ESICON 2013: 43rd Annual
Conference of Endocrine society
of India: Bhopal: 18-20 October
2013. Organizing Secretary: Dr
Sushil Jindal.

**ISPAE 2013 & ISPAE-PET 2013
(Pediatric Endocrine Training):**
Bengaluru.
ISPAE Main Meeting: 29-30
November 2013. ISPAE-PET: 26-
29 November 2013.
Organizing Secretary: Dr Shaila
Bhattacharyya, email:
shailashamanur@gmail.com



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SECRETARY'S MESSAGE

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...senior members to guide us with their wisdom and experience and young enthusiastic members to carry forward the torch.

Last year saw a number of good scientific meetings organized by, or with significant involvement of, our members across the country. Since the last CAPE NEWS these include "Annual ISBMR Meeting" at Lucknow, "PEP 2012" organized by Drs Raghupathy and Bhattacharyya at Bengaluru, "Practical Pediatric Endocrinology Course" at Kanpur by Dr Anurag Bajpai, "CME on Pediatric Endocrinology" at Kannur by Dr Reetha Gopinath, "Diabetes Update" by Dr Hemchand Prasad at Chennai, "Diabetes Awareness Week" by Dr Krishna Biswas, "Pre-conference Workshop on Pediatric Endocrinology" with Kerala Pedicon by Dr Vijayakumar, "ISPAD Postgraduate Course for Pediatric Diabetes" at Ahmedabad by Dr Banshi Saboo and Dr Shalmi Mehta, ESICON 2012 at Kolkata by Dr Shubankar Choudhry and Dr Sujoy Ghosh, and CDiC courses by Drs Anju Virmani, Abhishek Kulkarni and Ganesh Jevalikar. World Diabetes Day was celebrated at many centers; PEDICON 2013 lies ahead in January In Kolkata. Many ISPAE members actively participated in these meetings, all of which were very well received by the participants.

Our International collaboration took a step forward with organization of a "CME on Childhood Diabetes" with the International Society of Pediatric and Adolescent Diabetes (ISPAD) by Dr Rajesh Khadgawat and Dr Vandana Jain at AIIMS, New Delhi. Dr Ragnar Hanas (Sweden) Dr Warren Lee (Singapore), Ram K Menon (USA), and a galaxy of national experts participated in this meeting. Five of our members have participated creditably in the APPEL Fellows' School in Bali (see report below): Tushar Godbole (Lucknow), Sachin Mittal (Mumbai), Rakesh Kumar (Chandigarh), Ram Kumar (New Delhi) and V Srinagesh (Hyderabad). Dr Sachin Mittal won the Runner-up prize for the Best Fellow's Case Presentation. We have also been offered slots in the 3rd ESPE Science School to be held in 2013 at Israel: Dr Ram Kumar has been accepted from India.

I am also happy to recall that we have been able to start the ISPAE Travel Award this year. Dr Kriti Joshi and Dr SK Patnaik were selected for 2012. While Dr Joshi has completed her observership at SGPGIMS, Dr Patnaik is currently pursuing it (see reports below). The advertisement for the 2013 Award appeared in Indian Pediatrics; details were sent to all members and put on the website. The last date for application is 31st December 2012. We are fortunate to have Ranbaxy Ortholands Limited taking up sponsorship of this activity.

Our annual GBM was held in Delhi on 4th November, and the minutes were sent to all of you (please see below also). We now look forward to ISPAE 2013 in Bengaluru, under the stewardship of Dr Raghupathy, Dr Bhattacharyya and Dr Nijaguna, in

November 2013. Work will shortly begin for ISPAE-PET 2013 under the stewardship of Dr Preeti Dabadghao.

I welcome several new members to the Society. I also take this opportunity to sincerely thank Dr Menon, who, as a very 'hands on' President of the Society, guided me on every step, Working under his guidance was a huge learning experience. Dr Preeti Dabadghao worked in close conjunction with me and shared the work load admirably. Dr Ravikumar has transformed the ISPAE website completely and added new features like the Discussion Forum. I am also very thankful to the entire Executive Council, who actively participated in the decision making process by offering varied perspectives and opinions. Lastly, Dr Anju Virmani and Dr Vijayalakshmi Bhatia, with their vision, experience and passion for the Society, were a huge support.

We now look forward to a new team taking over the reins of ISPAE and carrying forward the work. I extend my hearty congratulations to Dr Vaman Khadilkar, Dr Sangeeta Yadav and Dr Ganesh Jevalikar elected unopposed as the President, Secretary and Joint Secretary respectively, and the new Executive. Under their leadership I am sure ISPAE will continue to grow, and play an ever-increasing role in furthering the cause of pediatric endocrinology in the country.

With warm regards,
Anju Seth

ISPAE NEWS

Dear members of ISPAE,

We (I, Preeti Dabadghao, Kriti Joshi and Ashwani Guleria) have just finished opening the ballot papers and counting the votes. The results are as follows:

The following seven members have been duly elected as Executive members for the term Jan 2013 - Dec 2014:

1. **Dr Abhishek Kulkarni**
2. **Dr Leena Priyambada**
3. **Dr Meena Mohan**
4. **Dr Riaz I**
5. **Dr Saroj K Patnaik**
6. **Dr Shaila Bhattacharyya**
7. **Dr Vijay Sarathi.**

Many congratulations!

So our final team is

**President: Dr Vaman Khadilkar,
Secretary Dr Sangeeta Yadav,
Joint Secretary Dr Ganesh Jevalikar,
Executive: As above.**

Sincerely,
Vijayalakshmi Bhatia
Returning Officer
ISPAE Election 2012

NEW MEMBERS: A VERY WARM WELCOME!!

1. Dr MOHAMMAD HYAT BHAT, Srinagar
2. Dr SIRISHA KUSUMA BODDU, Bengaluru
3. Dr RUMA DESHPANDE, Pune
4. Dr DHIVYALAKSHMI J, Chennai
5. Dr DEEPAK DWIVEDI, Rewa
6. Dr SANTOSH GUPTA, Saint Louis
7. Dr DEEPAK KHURANA, New Delhi
8. Dr Col SVS KRISHNA, Secundrabad
9. Dr SREEJA MADHAVAN, Trivandrum
10. Dr SANTOSH OLEY, Bengaluru
11. Dr MEEENA RAJ, Chennai
12. Dr ROLI SRIVASTAVA,
13. Dr KISHORE Y VRAJANANDA, Bengaluru
14. Dr SUMAN YADAV, Jaipur

MINUTES OF GBM: 4th NOV 2012: AIIMS, DELHI

Preeti Dabadghao, Joint Secretary, ISPAE

The annual GBM of the ISPAE was held on 4th November 2012 at Jawahar Lal Nehru auditorium, AIIMS, New Delhi, during the ISPAE-ISPAD Diabetes Update Meeting, chaired by Dr PSN Menon and Dr Anju Seth. The meeting was attended by 18 members. The minutes of the meeting are as follows:

1. Minutes of previous GBM held at Calicut in Nov 2011 were approved.
2. Audit of ISPAE 2011: Following points were discussed:
 - a. Audited statement of account of ISPAE for the financial year 2011-2012 was circulated amongst the members. This did not include accounts from ISPAE 2011 Biennial Meeting at Calicut since the same was yet to be audited.
 - b. The members, including organizers of ISPAE 2013, were informed that amalgamation of accounts of the conference with ISPAE accounts is necessary as the meeting is an official event of the Society. PAN number of the Society can be used for this meeting, this being a Society activity.
 - c. Organizers of ISPAE 2013 were advised to make an allowance for the payment to the auditor/s beforehand while preparing the budget for the upcoming conference.
 - d. The Organizing Secretary/Treasurer of ISPAE-2013 was requested to submit an account statement providing details of all financial transactions done before 31st March 2013 to the Secretary/Treasurer of ISPAE for submission of IT returns and audit purposes.
3. Welcoming new members to ISPAE: 18 new members of ISPAE were welcomed.

4. Organization of ISPAE 2013 and ISPAE-PET 2013:

- a. Current status was discussed.
- b. Dr S. Bhattacharyya updated members on the dates and early bird registration of ISPAE 2013.
- c. Dr PSN Menon informed everyone about communication with APPES and ESPE (who have promised to give 4 faculty, 2 for PET and 2 for the main meeting). Further information on faculty from APPES will be given after the biennial APPES meet this year in Bali.
- d. The difficulty in having the same international faculty both for PET and main meeting, as pointed out by Dr J-C Carel, was discussed.
- e. Dr Bhattacharyya will update the Executive Council on the progress of discussions with Novo Nordisk, the sponsors for ISPAE PET regarding financial commitments.

5. ISPAD-ISPAE Diabetes Update at New Delhi:

All members applauded the organizing team of ISPAE-ISPAD update 2012 for a wonderful organization.

6. The possibility of holding an ISPAE-ISPAD meeting alternating yearly with the main biennial ISPAE meeting was discussed and all members supported this idea. The timing, nature and content of these meetings can be developed subsequently as a joint activity of ISPAE and ISPAD. It was suggested that the Secretary, ISPAE can ask for volunteers among ISPAE members for organizing this meeting in different parts of the country. This can be done at the same time as asking for volunteers for the next ISPAE Biennial Meeting.

7. Activities under the banner of IAP Subspecialty Chapter: As we are also working as a Chapter of IAP, it was decided to hold local meetings under the banner of Pediatric & Adolescent Endocrinology Chapter of IAP.

8. Dr Kriti Joshi has completed her Travel Observership at SGPGI, Lucknow.



She was presented a certificate for the Travel Award by the office bearers. The cheque would be given to her on submission of her report to the Secretary, ISPAE. The

other awardee is Dr Saroj Patnaik.

**ISPAE Travel Grant Award: Report on
observership at SGPGIMS, Lucknow**

Kriti Joshi, kriti.joshi6@gmail.com

I was privileged to do my observership in the Pediatric Endocrinology division of the Dept. of

Endocrinology, SGPGIMS, Lucknow, in June 2012. It was an academically enriching experience, giving me the opportunity to observe and participate in the clinical, laboratory and research work carried out in the department. I saw a wide spectrum of cases - thyroid, growth, adrenal, gonads, pituitary and bone. Inpatient management was another learning forum. Importantly, I learnt the emergency management of DKA, CAH with acute adrenal insufficiency, neonatal hypoglycemia, electrolyte disturbances and other pediatric endocrine cases. I was privileged to observe the care of diabetic patients and learnt many issues regarding practical management of childhood diabetes such as various devices available, dietary issues, and SMBG.

The daily morning teaching sessions - which included seminars, journal clubs, case presentations, case reviews and project presentations - were a fount of knowledge. Endopathology and Endoradiology sessions further enhanced my knowledge of the ancillary investigations which form a core part of endocrine patient care. I learnt endocrine diagnostic testing such as GH testing, GH suppression, RTA testing, and Dehydration testing for DI. I benefitted from the well run laboratories of the department and was able to observe the working of the chemiluminiscence assays for hormones such as T4, TSH, cortisol; and specialized assays for 25OHD, 17OHP, Testosterone, etc.

Most importantly, I was able to participate in and learn from the newborn screening program (for congenital hypothyroidism (CH), galactosemia and biotinidase deficiency) being carried out jointly by the Depts. of Endocrinology and Genetics. I was able to observe all aspects of newborn screening- counseling of mothers, the actual process of sample collection, transport of samples, processing of the samples in the lab, reporting of the results; using appropriate cut offs, recalling babies for confirmatory testing. During this time period I carried out a small project on "Recall rates in NBS for CH using age related cut offs for TSH". We concluded that by using age related cut offs for TSH values the recall rate could be significantly reduced.

I am grateful for this opportunity which allowed me to enhance my knowledge of pediatric endocrinology immensely.

Preliminary Report: ISPAE Travel Grant Award December 2012

Saroj K Patnaik, drskp1973@yahoo.com

I have started the Travel Award Observership for 6 weeks from 02 Nov in the Pediatric Endocrinology Division of the Dept. of Endocrinology, SGPGIMS, Lucknow, under the mentorship of Prof Vijayalakshmi Bhatia and Dr Preeti Dabadghao. It has been a unique exposure in the following aspects -

a) This center caters to a large expanse of North India, especially Central and Eastern UP and Bihar, in a paid

healthcare model. A strong bedside clinical approach with a goal-directed investigative approach integrating the socioeconomic affordability of treatment (especially considering the low socioeconomic status of majority of the clientele here) is the hallmark of this center.

b) A fully computerized health management system is another outstanding feature of this institution. This makes accessible for observers like me, a long term documented follow up of patients even during the limited period of stay, and makes one wiser about the natural history of various endocrine disorders. The experiences and insights shared by the faculty with the postdoctoral students go beyond the textbooks.

c) Being an academic endocrinology center, I continue to be exposed to the concurrent academic teaching sessions for the students, and have an active hands-on participation in inpatient and outpatient care, including dynamic function testing. Special attention is given by both Prof V Bhatia as well as Dr Dabadghao in guidance and discussion of approach to clinical problems, and honing of bedside skills in clinical endocrinology. The PDCC student as well as the DM residents have been very warm and made me feel part of the team and it has been a pleasure to work alongside them.

d) While the entire spectrum of pediatric endocrinology is available here, I was particularly interested to observe the approach to and follow up of Type 1 diabetes patients. The art of counseling and education of children with diabetes by a dedicated team of endocrinologists, nurse and nutritionist, such as is available in large endocrine centers, is worth emulating everywhere.

e) Apart from the clinical endocrinology laboratories with facilities for various endocrine assays, and the bone densitometry laboratory, I also have had exposure as well as opportunity to do lab bench work in the molecular endocrinology and genetics laboratories, with encouragement from Prof Eesh Bhatia. I have had opportunity to observe rat pancreatic islet cell extraction, cytogenetics including microarray (in the Genetics Dept. with Prof. Shubha Phadke's team), do DNA extraction from clinical samples, PCR and gene sequencing and interpretation of sequencing data for mutations in prototype AIRE and RET genes during this brief period.

f) In addition, it has been a unique opportunity to observe the functioning of a community based newborn screening program for hypothyroidism, galactosemia and biotinidase deficiency. I also had an opportunity to see the NBS laboratory - handling of filter paper blots of heel prick/cord blood and perform the assays.

Finally, I have been able to formulate protocols and initiate projects with the collaboration of Prof V Bhatia and Dr Dabadghao, pertaining to evaluation of biomarkers for microvasculopathies in children with Type I diabetes. The work on the same will continue beyond my period as Observer, which finishes on 14th Dec 2012.

Update on ISPAE Website

Karnam Ravikumar, ravikarnam@doctors.org.uk

The new ISPAE website with a modified design and contents was launched in August 2012. The Front page features a slideshow of photos, drop-down menu and an updatable list of meetings and events. Photos are all grouped under community and outreach services and can be viewed as a slideshow. The CAPE NEWS newsletters are archived as HTML pages but are also available for download as PDF files. The new website also has fully searchable member list with contact details.

- Do you know of any syndromes with CDH and congenital hypothyroidism?
- Do you know the causes of hemihypertrophy?
- Can *Acton Prolongatum* be used for ACTH stimulation test? What dose?

If you know answers to any of the questions, or have a list of similar questions that you want to ask others, register with the **ISPAE Discussion Forum** and start! E-mail Dr K G Ravikumar at ravikarnam@doctors.net.uk for registering with ISPAE Forum.

ISPAE 2013, ISPAE-PET 2013: Bengaluru

Warm greetings from the Organizing Committee of ISPAE 2013! It gives us great pleasure to welcome you all to the beautiful garden city of Bengaluru for the 3rd Biennial ISPAE Conference: ISPAE 2013 (29-30 November) and the Pediatric Endocrine Training (PET) Program (26-29 November). The preparations for a grand ISPAE 2013 are on full swing. The Scientific Committee, led by Prof Raghupathy and Dr Vaman Khadilkar, aims to cover a wide range of topics of interest to practicing pediatricians, pediatric endocrinologists and adult endocrinologists looking after children. The registration form is available at our website, www.ispae.org.in.

We are sure you will enjoy not only the academic feast, but also the art, music, food and culture! Looking forward to meeting you all soon,

With warm regards and best wishes,

Dr P Raghupathy (Organising Chairperson) &

Dr Shaila S Bhattacharyya (Organizing Secretary)

PEARLS FROM BALI: A Report on the 14th APPES Fellow School

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The 14th APPES Fellows School at Bali had the usual residential format, with sessions comprising case presentations by fellows followed by faculty talks. The

group discussions were very informative with a free-wheeling exchange of ideas in an informal interactive setting.



14th APPES Fellows School
10-14 November 2012
Bali, Indonesia



The meeting started with a session on Growth, with cases like pseudoachondroplasia, Berardinelli Seip syndrome, Turner Syndrome etc. Dr Reiko Horikawa (Japan) in her talk emphasized the basics and physiology of growth while touching on various pathological states. In the Bone session, Dr Craig Munns (Australia), after discussing various abnormalities of calcium-phosphorus metabolism, also explained the basics of pediatric bone densitometry. The Puberty session generated considerable discussion about secular trends in puberty and various age-cut-offs for defining precocious puberty in different parts of the world. In the Thyroid session, Dr Maria Craig (Australia) covered development of the thyroid gland and various aspects including genetic causes of congenital hypothyroidism. Dr Tohru Yorifuji (Japan) in the Hypoglycemia session discussed congenital hyperinsulinism due to K-ATP channel in detail. Dr Cheri Deal (Canada) gave a simplified and beautiful insight into various disorders of genomic imprinting, especially in the context of the IGF-2 gene and growth. Dr Nalini Shah (India) gave a well appreciated talk on pediatric adrenal disorders. Dr Kah-Yin-Loke (Singapore) explained childhood hypopituitarism in a lucid case discussion manner. In the DSD session, Dr Paul Hoffman (New Zealand) emphasized the basic aspects of gonadal development and sexual differentiation. Endocrine emergencies were discussed by Dr Wayne Cutfield (New Zealand), using case based scenarios. At the end, gynecologic problems in childhood and adolescence were nicely dealt with by Dr Margaret Zacharin (Australia).

Dr Aoife Carrol (Australia) received the award for **Best Fellow's Case Presentation**; **Dr Sachin Mittal won the Runner-up prize.**

Here are some learning points from the School:

Gynecology:

** One should be aware of the mild genital atypia like mild clitoromegaly in premature female infants.

- ** Care should be taken in interpreting FSH, LH levels in preterm babies.
- ** Preterm ovaries can have cysts that are normal, which can be confused with ovo-testes.
- ** Breast asymmetry is common in adolescence. Non-endocrine conditions like 'Poland anomalad' can cause asymmetry. Estrogen treatment is best avoided; surgery too should be avoided till one is certain about there being no spontaneous improvement.
- ** Ovarian failure after chemotherapy can recover, however HRT is warranted at the appropriate age.
- ** Puberty induction with estrogen should be slow, in order to avoid misshapen breasts.
- ** Labial adhesions are common in prepubertal girls, and reflect estrogen deficiency. Local estrogen application can open the adhesions. Surgery is contraindicated as the condition resolves at puberty.
- ** Menstrual and fertility regulation in mentally disabled adolescent is challenging. OCPs increase the risk for DVT and interact with many anticonvulsants. Progesterone IUDs and depot progesterone are other options.

Adrenal:

- ** Adrenal TB is a common cause of acquired adrenal insufficiency in developing countries. Serum ACTH, cortisol day curve or UFC are not useful in monitoring the treatment of adrenal insufficiency. Clinical judgment [growth velocity, symptoms of fatigue, appearance of Cushing's syndrome] is important.
- ** It is important to pick Cushing's in the early stages. Some girls can present with obesity with irregular menstrual cycles [as PCOS].
- ** Though there is a lack of gold standard for diagnosis of Cushing's, borderline results are usually false positive. Clinical judgment and observation over time is crucial.
- ** Optimizing the pituitary MRI imaging with 2-3 mm cuts and dynamic contrast can give a better localization yield. This must be discussed with the radiologist in advance.

Calcium and vitamin D:

- ** The Z score, and not T score, should be considered while interpreting DXA in children. Evidence of fragility fractures with Z score below -2SD, and not low Z score alone, defines "osteoporosis" in children.
- ** Maximizing physical activity, supplementing calcium with vitamin D, ensuring normal pubertal progression, minimizing osteotoxic medicines and

monitoring growth velocity are the keystones of the management of osteopenia in children.

- ** Bisphosphonates can be used in treating primary [JIO/ Osteogenesis imperfecta, fibrous dysplasia] as well as secondary osteopenia [glucocorticoid/ immobilization/ malignancy induced osteopenia, JIA]. They are known to delay fracture healing. Dosing should be pre/postponed depending on fracture frequency and planned orthopedic intervention.
- ** PTH estimation gives important information in evaluation of any calcium disorder; and should be taken as a starting point.
- ** William syndrome, as a cause for hypercalcemia, is very sensitive to bisphosphonates and often hypercalcemia resolves after a single dose. Use of steroids is less preferred now-a-days.
- ** Pseudohypoparathyroidism [as a part of PHP1a] is often associated with other endocrine abnormalities like hypothyroidism, hypogonadism, GH deficiency and diabetes.
- ** Calcitriol [1,25-OH₂-D] can be used for treating neonatal hypocalcemia for short periods as it reduces the calcium infusion requirement.
- ** Estimation of maternal vitamin D level is important; deficient mothers should be treated.
- ** Fragility fractures are common in rickets, however, possibility of abuse should be considered.
- ** Irrespective of the etiology, hypophosphataemia is the underlying mechanism for rickets. There is no perfect regimen for treating Vitamin D deficiency rickets.

Diabetes:

- ** The incidence of T1DM is increasing, with increasing proportion of low risk HLA groups and younger children [less than 5 years]. Many perinatal factors such as birth weight, maternal age, birth order, inter-pregnancy interval and mode of delivery are being studied for later risk of developing T1DM.
- ** Treatment modalities like 'Stem Cell Educator' are being tried with limited success [reduction in insulin dose, mean A1c and improved C-peptide levels]. Whole blood is run through an extra-corporal circuit where the patient's lymphocytes 'co-culture' with stem cells for brief periods before returning back to the patient's circulation. (Yong Zhao *et al*, 2012)
- ** Mucormycosis can present early in the course of T1DM. Rhino-orbito-cerebral mucormycosis is the commonest type; the mainstay of therapy is surgery with liposomal Amphotericin B. Conservative eye

sparing approach and adjuvant therapies with chelation/ hyperbaric therapy have been tried.

** Methyl malonic academia is a rare cause of diabetic ketoacidosis with associated failure to thrive, delayed milestones, myopathy and hepatomegaly. Management is mainly dietary, along with supplementation of carnitine and vitamin B₁₂.

Endocrine Emergencies:

** Carbamazepine and thyroxine deficiency often mask central diabetes insipidus.

Growth:

** Catch up in SGAs can be predicted by 3mo of age. 80% SGAs catch up by 6mo and 90% by 2-3y.

** SGA being a heterogeneous group, response to GH therapy is highly variable.

** There are several limitations to GH testing. Making a lab diagnosis of GH deficiency, and deciding to start GH treatment, should not be based merely on the test reports.

** Berardinelli-Seip syndrome is a rare cause of growth failure, associated with lipodystrophy, insulin resistance and mental retardation. Treatment is low fat diet, metformin plus cosmetic surgery.

Hypoglycemia:

** Patients with defects in glycogenolysis and gluconeogenesis, but not hyperinsulinism, are euglycemic at physiologic glucose infusion rates [GIR]. Timing and relation with feed can suggest the probable diagnosis. In patients with diazoxide unresponsive hyperinsulinemic hypoglycemia [HH], genetic tests + PET scans help in deciding further management. While bi-allelic mutations in KCNJ11/ABCC8 usually need pancreatectomy, paternal mono-allelic mutations can be managed by partial pancreatectomy [focal uptake on PET] or long term octreotide [diffuse uptake] treatment. Most KATP-HH remit spontaneously over time.

On behalf of all the Indian fellows, we thank ISPAE for giving us this learning opportunity and we strongly recommend this Fellow School to newbies like us.

Pedendoscan

Leena Priyambada, leenapriyambada@gmail.com

Metformin in Obese Children and Adolescents: The MOCA Trial. D Kendall, A Vail, R Amin, et al. **JCEM 98: 2013.**

The MOCA trial was a multicenter, prospective, randomized, double-blind, placebo-controlled trial to assess the effect of metformin on body mass index SD score (BMI-SDS), metabolic risk factors, and adipokines. One hundred fifty-one obese children (8–18y, stratified by gender and age, 8–13y and 14–18y) with hyperinsulinemia and/or impaired fasting glucose or impaired glucose tolerance received metformin 1.5 g daily vs. placebo for 6 months.

Metformin was associated with a significant reduction in BMI from 37.1 (6.35) kg/m² at baseline to 36.56 (6.56) kg/m² at 3mo, compared with placebo ($P=0.004$). This reduction was also sustained at 6 months ($P=0.005$). ALT (SGPT) significantly improved in the metformin group at 3mo, but this was not sustained at 6mo. Metformin was associated with a reduction in fasting glucose (FBG) at 3mo cf. the placebo group ($P=0.047$). The reduction in FBG was sustained at 6mo, but it was not statistically significant. There were no significant changes in adiponectin, resistin, and leptin concentrations. However, the adiponectin to leptin ratio (ALR) significantly improved at 3mo in the metformin group cf. the placebo group. There were no suspected unexpected serious adverse reactions or events. The authors conclude that metformin has a beneficial treatment effect over placebo for BMI-SDS, FBG, ALT, and ALR ratio at 3mo, with changes in BMI-SDS sustained at 6mo.

Lack of sensitivity of the 1-μg low-dose ACTH stimulation test in a pediatric population with suboptimal cortisol responses to insulin-induced hypoglycemia. MJ O'Grady, C Hensley, M Fallon, H Hoey, N Murphy, C Costigan. **Clinical Endocrinology 78(1): 73–78, 2013.**

The authors aimed to compare the sensitivity of the low-dose (1-μg) Synacthen™ test (LDSST) and the gold-standard Insulin Tolerance Test (ITT) in a pediatric and adolescent population. They reviewed retrospectively 42 consecutive LDSSTs in children and adolescents (31 male, median age 13.2y, range, 5.8–18.2y) with suboptimal cortisol responses (peak <500 nm) on ITT. Using the highest peak cortisol achieved, 31 (74%) showed an adequate cortisol response to low-dose Synacthen™ (>500 nm or 18.1mcg/dl) at 30 or 60 min giving a sensitivity of 26% when using this vs. ITT as gold standard. Increasing the cut-off

threshold using peak cortisol >750 nm (27 mcg/dl) increased the sensitivity of the LDSST to 93%. Patients had a higher cortisol increment with the LDSST than ITT [median Δ cortisol 294 vs. 168 nm, $P < 0.0001$]. Patients who had a suboptimal peak cortisol both on ITT and on ACTH stimulation tended to have a lower baseline cortisol on ITT [median 178 vs. 227 nm, $P = 0.04$ (95% CI -133 to -3)] than those with a suboptimal peak cortisol on ITT and a normal LDSST.

The authors concluded that the 1- μ g ACTH stimulation test lacks sensitivity in detection of asymptomatic secondary adrenal insufficiency when compared to the gold-standard ITT. That LDSST can miss children with mild CAI has also been documented in other studies. (Maguire AM, et al. Clin Endocrinol (Oxf). 2008 May; 68(5):683-91; Kamrath C, et al. J Pediatr Endocrinol Metab. 2010 Nov;23(11):1097-104.)

Adult Height in Short Children Born SGA Treated with Growth Hormone and Gonadotropin Releasing Hormone Analog: Results of a Randomized, Dose-Response GH Trial. Annemieke J. Lem et al for Dutch Growth Research Foundation. JCEM 97; (11): 4096.

In this longitudinal, randomized, dose-response GH trial, 121 short SGA children (60 boys) at least 8y of age received GH (2mg/m²/day vs 1 mg/m²/day). An additional 2y postponement of puberty by GnRHa was given to children who were short at the start of puberty (<140 cm), with a poor adult height (AH) expectation. The median age was 11.2y, when 46% had already started puberty. Median height increased from -2.9 at start to -1.7 SD score (SDS) at AH ($P < 0.001$). Treatment with GH 2 vs. 1 mg/m²/d during puberty resulted in significantly better AH ($P = 0.001$).

Impact of Antenatal Synthetic Glucocorticoid Exposure on Endocrine Stress Reactivity in Term-Born Children. Alexander N et al. JCEM 97: 3538–3544, 2012.

Antenatal glucocorticoid (GC) exposure has been discussed as a potent programming factor of hypothalamus-pituitary-adrenal (HPA) axis activity, producing sustained alterations in cortisol secretion throughout life. In a cross-sectional study of 209 term-born children, 6-11y old, exposed to antenatal synthetic GC treatment; significantly increased cortisol reactivity to acute psychosocial stress

compared to controls ($p < 0.001$) was seen. This finding appeared to be independent of the specific synthetic GC used and was found to be more pronounced in females.

This study demonstrates long-lasting effects of fetal overexposure to synthetic GC as a probable potent programming factor of the developing HPA-axis in term-born children.

Transition in endocrinology: the challenge of maintaining continuity. Downing J, Gleeson HK, Clayton PE, Davis JRE, Wales JK & Callery P. Clinical Endocrinology (2013) 78, 29–35.

A retrospective analysis of data for 103 patients following transfer from pediatric services to a Young Persons' transition clinic (jointly run by the pediatric and adult endocrine services) was done. Overall one quarter of patients did not attend the Young Persons' Clinic (YPC) in the first year after transfer. Factors affecting this 1y post-transfer nonattendance were assessed. Patients who had poor attendance prior to transfer and those without an appointment scheduled in the first 6mo of their final pediatric transfer appointment were less likely to attend in the first year.

The challenge of delivering endocrine care and successful transition to adult services in adolescents with congenital adrenal hyperplasia: experience in a single centre over 18 years. Gleeson H, Davis J, Jones J, O'Shea E, Clayton PE. Clinical Endocrinology 78: 23–28, 2013.

The authors aimed to evaluate if patients with CAH successfully transitioned from pediatric care to specialist adult services, and the influence of the introduction of a YPC where the young person is introduced to the adult endocrinologist. Records of 61 patients (27 men) were analyzed: 37 were referred from the pediatric service, and 24 from YPC to specialist adult services. 50% of the patients from the pediatric services were lost to follow-up. In the entire group, only 53% patients attended the first new and subsequent second appointment with adult services. Introducing the adult endocrinologist prior to transfer via YPC had no positive effect on engagement with adult services. Attendance at the first 2 appointments in the adult services should be seen as an indicator of 'reasonable' engagement.

These 2 studies highlight an important issue which needs to be taken care of by the treating pediatric endocrinologist. Surprisingly the transition clinic does not seem to have increased attendance rates in the adult clinics. These studies were

retrospective. A prospective longitudinal analysis with a pre-structured questionnaire can get into the mindset of these patients and can give valuable information. Also, studies in a different health set-up like ours are needed.

MORE NEWS!

CDiC TRAINING PROGRAMS

The theme of the continuing series of Diabetes Education Training Programs for health care professionals being organized as part of the Changing Diabetes in Children (CDiC) program by Novo Nordisk Education Foundation is “Treating Diabetes in Children is different from treating diabetes in adults.”



After workshops in Hyderabad, Mumbai, Indore, and Kanpur, the Aurangabad program was on 26th August 2012. It in partnership with Dr Archana Sarda, and conducted by her and the team of Drs Anju Virmani, Abhishek Kulkarni,

and Shuchy Chugh. It was attended by 26 physicians and one dietician caring for diabetes, including several homeopaths. A very moving film on the social and financial aspects of T1DM made by Dr Sarda's center was screened and liked very much by all.



Seminar on Technological Advances in Bone Health Management: Gurgaon

Anju Virmani, virmani.anju@gmail.com

This seminar was held on 8th September at Hotel Leela Kempinski, Gurgaon, ably organized by Ms Sonal Pandya of Johnson & Johnson. In his Key Note Address, Dr Arvind Lal Padmashri, of Dr Lal Pathlabs, gave an excellent overview of Vitamin D status worldwide today. Prof Morris Howard, from University of South Australia, gave fascinating talks on “Critical Levels of serum 25(OH) Vitamin D for calcium and bone homeostasis”, and later “Optimizing Vitamin D replacement therapy-evidences from clinical trials”. Dr Andrew St John, President of the Australasian Association of Clinical Biochemists, discussed “Vitamin D testing in the laboratory- testing methodologies and requirements”. It ended with a Panel Discussion on “Emerging bone health



markers and role of Vitamin D”, moderated by Dr Anju Virmani. Some useful insights:

** Obesity does not protect against Vitamin D deficiency (VDD), since fat does

not seem to be a storage tissue. Rather, it appears to sequester and destroy Vitamin D, so obesity is a risk factor for VDD.

** Vitamin D level > 8 ng/ml is sufficient to prevent osteomalacia, but > 30 ng/ml is needed to prevent fractures.

** We lose about 800 mg of calcium daily, so basal needs of Ca are at least 800 mg/ day.

** Phosphorus is critically needed for maintaining bone health. Serum P has a 100% variation in the normal range, while serum Ca has a much narrower range (~10%).

** Grimnes et al (Osteoporosis Int 2012) showed no increase in renal stones with intakes of calcium 1 gm/day, Vitamin D 6500 IU/day, and serum Vitamin D of 74 ng/ml.

** Vitamin D assay is technically difficult because it is fat soluble. However, with DEQAS (Vitamin D external quality assessment scheme, whose overall aim is to ensure analytical reliability of 25OHD and 1,25(OH)2D) assays) inter-lab imprecision has been reduced from > 30% in 1995, to < 15% in 2011 (though ideally this should be < 10%).

Pediatric Endocrinology for PGs 2012 (PEP 2012): Bangalore

P Raghupathy, drp.raghupathy@gmail.com

A two day Symposium/ Workshop was held in Bangalore on 15-16 September 2012 for postgraduates pursuing MD or DNB courses in pediatrics. The program was organized by the Departments of Pediatric Endocrinology at the Indira Gandhi Institute of Child Health and Manipal Hospital, Bangalore, under the auspices of ISPAE. The objective was to provide teaching sessions in pediatric endocrinology to the attendees, in preparation for their postgraduate clinical and theory examinations.

It was attended by 47 postgraduates from the southern states of Karnataka, Kerala and Tamil Nadu. Interactive sessions were held with 28 clinically oriented case presentations by the postgraduates and discussed by the faculty members. Common topics were included with practical sessions. Drs. PSN Menon, P Raghupathy,

Anurag Bajpai, Shaila Bhattacharyya, Sudha Rao Chandrasekhar, and A Ahila were the faculty.



8th Annual Meet of ISBMR: SGPGIMS, Lucknow

V Bhatia, bhatiaviiji@gmail.com

The 8th annual meeting of the Indian Society for Bone and Mineral Research was held at SGPGIMS Lucknow, on 29-30 September 2012. Many of our pediatric endocrine members spoke or attended the meeting. The concept of osteoporosis as a musculo-skeletal (and not just a skeletal) disease was highlighted by Dr Ambrish Mittal. Early life influences on adult bone health were highlighted by Dr Nikhil Tandon, describing findings from the New Delhi Birth Cohort. Dr Raman Marwaha revised for all, the status of knowledge about osteoporosis in India. Dr Anju Seth debated the pros and cons of routine vitamin D supplementation for all infants, while Dr Geeta Trilok, author of the DIVIDS study, covered the difficult topic of what is adequate dietary calcium and how to meet the challenge in a developing country. Our international speakers Dr Ian Reid and Dr Sudhaker Rao provided perspective all through the day's deliberations, in addition to giving their own excellent talks on Bone Histomorphometry and Risks and Benefits of Calcium Supplementation, respectively.

There were very good posters from young colleagues in CDRI Lucknow, PGIMER Chandigarh, AIIMS Delhi, SGPGIMS and Era Medical College Lucknow, NIN Hyderabad, Guwahati Medical College, UCMS and MAMC Delhi. The best oral paper awards were bagged by Priyanka Kushwaha, from the lab of Dr Ritu Trivedi from CDRI for "CAFG from natural sources is more potent than genistein in promoting bone formation", and Kainat Khan from the lab of Dr Naibedya Chattopadhyaya, CDRI, for "Gingerol induces bone loss in ovary in intact adult mice and augments osteoclast function via V1 receptor". The best poster awards were won by DN Singh, mentored by Dr Amit Agarwal, Dept of Endocrine Surgery, SGPGIMS, for "Bone mineral density in primary hyperparathyroidism with brown tumors and pathologic fractures" and by Vandana Dhiman, mentored by Dr Sanjay Bhadada, Dept of Endocrinology, PGIMER for "Validation of colla colla2 in Indian population with osteogenesis imperfecta".

Pediatric Conference of North India (PCNI) 2012

Anju Virmani

PCNI was held on 6-7 October 2012 in Dwarka, Delhi, hosted by IAP West Delhi City Branch under the patronage of IAP Delhi. It was ably organized by a team lead by Dr Uttam Pal and Dr Peeyush Khanna. The endocrine session consisted of talks on "Office Management of Obesity: Practical Aspects" by Dr Rekha



Harish (Head, Dept of Pediatrics, Govt. Medical College, Jammu) and "Vitamin D Deficiency Beyond Rickets": by Dr Anju Seth. It was chaired by Dr GS Kochhar (Head, Dept of Pediatrics,

Maharaja Agrasen Hospital, Delhi) and Dr Anju Virmani (Head, Endocrinology, SLJ Hospital, Delhi).

Practical Pediatric Endocrinology Course (PPEC) October 27-28 2012, Kanpur

Anurag Bajpai, dr_anuragbajp1@hotmail.com

PPEC was organized by Dept. of Pediatric Endocrinology, Regency Hospital, Kanpur & Academy of Pediatrics, Kanpur. The two day course used six (Growth, Puberty, Thyroid, Diabetes, Calcium and bone, Electrolyte disorders) case based modules to provide information about common Pediatric Endocrinology issues to pediatricians. The faculty included Prof. PSN Menon & Anju Seth, Drs Subrata Dey, Anurag Bajpai, Meena Mohan, Abhishek Kulkarni, Sanjay and Vijay Jaiswal. It was attended by over 100 participants from all across North Central Region. The delegates were provided comprehensive resource book covering all aspects dealt in the meeting.



Other meetings conducted by Dr Bajpai were:

IAP Meerut Growth Workshop: The 6th Growth Workshop in the series of Growth Modules, held on 18th October at under the auspices of IAP Meerut, was attended by 60 participants. Dr Vijay Jaiswal and Dr Bajpai imparted practical knowledge regarding management of growth failure.

Obesity awareness program, Methodist High School, Kanpur: Academy of Pediatrics, Kanpur

organized a life skill training program at Methodist High School on 10 Nov 2012, for over 800 students. Dr Bajpai enlightened the students about the adverse impact of adolescent obesity and measures to prevent it. The educational session was followed by growth and adiposity assessment of 580 students.

Type 1 Diabetes Support Group Meeting at Medanta- The Medicity, Gurgaon

Ganesh Jevalikar, gjevalikar@gmail.com

A support group meeting of patients with type 1 diabetes and their parents was held on Sunday 21st Oct 2012 at Medanta Hospital. The meeting was attended by 18 patients and their family members. It was an interactive session with young diabetics and their parents asking



various queries about day to day diabetes management which were answered by Dr Ganesh Jevalikar and Ms Chhavi Kohli.

There was a discussion on childhood obesity in India and its prevention. This was followed by an entertainment program. This initiative was kindly supported by Sanofi Aventis and was highly appreciated by the attendees.

ISPAD PG Course for Pediatric Diabetes

Banshi Saboo, banshisaboo@hotmail.com & Anju Virmani

The Indian Academy of Diabetes organized an ISPAD Postgraduate Course for Pediatric Diabetes on 2–3 Nov, 2012 at Ahmedabad Management Association Auditorium, Ahmedabad, under the leadership of Drs Banshi Saboo, Sanjeev Phatak and Shalini Mehta. The program was also supported by API – Ahmedabad Chapter, IAP – Ahmedabad Chapter and the Novo Nordisk Education Foundation under the CDiC project.



More than 350 delegates attended the program which was conducted by over 50 faculty members, including 3 international faculty: Dr Ragnar Hanas (Pediatric Endocrinologist, Sweden), Dr Warren Lee

(Pediatric Endocrinologist, Singapore), and Dr Rahelic Dario (Diabetologist, Croatia). Other eminent speakers included Drs Shashank Joshi (Endocrinologist, Mumbai), Anju Virmani (Pediatric Endocrinologist, New Delhi), Rishi Shukla (Endocrinologist, Kanpur), and Deepak Dalal (Diabetologist, Mumbai). The program consisted of interactive sessions, with separate workshops for educators, dietitians and pediatricians. There were also workshops on Insulin Pump therapy, and monitoring. The course was a great success, and appreciated by all.

Both Dr Lee and Dr Hanas repeatedly pointed out that in managing T1DM, advising a 2 dose mix-split regimen was sub-standard care. Basal-bolus regimens work in even the most resource-poor situations, as they make more sense to patients, and cause less sugar fluctuations.

Dr Hanas emphasized that managing diabetes without home glucose monitoring was like driving a car with a clouded windshield! In the context of managing diabetes in toddlers, he pointed out that, contrary to the general perception, hyperglycemia was worse for the developing brain than hypoglycemia. High sugars caused myelin damage which could be permanent, while the cognitive effects of low sugars often proved to be transient. He therefore strongly advocated that both hyperglycemia and hypoglycemia be avoided. He also advocated advising pumps more aggressively to toddlers, as they greatly ease the otherwise very difficult management of this group. In his experience, glargine can be mixed with other insulins, provided it is injected immediately.

Dr Lee explained that MODY should be suspected diabetes is stable with only mildly raised sugars, like type 2 but without significant obesity or acanthosis nigricans; if there is strong family history (three generations); in diabetes with pancreatic insufficiency (diarrhea, bloating); or if renal structural abnormalities exist. He advocated regular screening for celiac disease, since occult disease does affect bone density and may cause symptoms, which may be ascribed to gastroparesis, and blamed on poor control.

Dr Param Shukla discussing psychological aspects of diabetes, pointed out that boys react to stress with externalizing behavior, while girls do so with internalizing behavior.

ISPAE-ISPAD-AIIMS CME on Childhood Diabetes, New Delhi

Vandana Jain, child.diabetes.ispae@gmail.com

The ISPAE-ISPAD-AIIMS CME on Childhood Diabetes was held at AIIMS, New Delhi on 4th-5th November, 2012. The faculty comprises of well-known national and international (Drs Ragnar Hanas, Sweden; Warren Lee, Singapore; and Dr Ram Menon, Michigan, USA) experts in the field.

The meeting began on an exciting note with Prof Nikhil Tandon sharing the interim findings from the ongoing ICMR Diabetes of Youth Registry in his talk on 'Epidemiology and Pathophysiology'. Prof PSN Menon, discussing the current scenario in India, emphasized the lack of prevalence statistics, and the increasing incidence of type 2 diabetes among adolescents. Dr Warren Lee discussing 'Genes, environment and immunity in the pathogenesis of type 1 diabetes', spoke on the interplay of infections and immune responses, and the effect of early life factors in the pathogenesis of diabetes.



In the session on 'Management of type 1 diabetes', Drs Shaila Bhattacharya, Anju Seth, Nalini Shah, Ram Menon, Ragnar

Hanas, Warren Lee and Vandana Jain provided a comprehensive overview, including ambulatory care, sick day management, exercise and sports, advances in management (newer pumps, CGMS), and complications (DKA, growth faltering). In the last session on 'Monogenic forms of diabetes and future therapies', Drs Eesh Bhatia, Jahnvi Suresh and Ragnar Hanas covered the various aspects of diagnosing MODY and neonatal diabetes, including information about availability of molecular diagnostic facilities in India, and therapies on the horizon, such as islet cell and stem cell transplant, immunotherapy and new drugs for type 1 diabetes.

The next day, Drs Archana Arya, Anuja Agarwala and M Vijayakumar discussed 'Hypoglycemia, nutritional and psychosocial aspects'. They covered the practical aspects of managing and preventing hypoglycemia, while maintaining optimal glycemic control; nutrition including carbohydrate counting, and recommendations for meals and snacks based on Indian diets; and the psychological and cognitive impacts of diabetes. The second session moved away to 'Obesity, metabolic syndrome and type 2 diabetes'. Drs Sangeeta Yadav, Sanjay Bhadada and Anju Virmani discussed the definitions, Indian data, and the management strategies for obesity, metabolic syndrome and type 2 diabetes in adolescents. The last session, a panel discussion on 'Current controversies', was moderated by Dr Ram Menon. The first topic discussed was 'Use of A1C as the

diagnostic criterion for diagnosing diabetes' by Dr Ragnar Hanas and Dr PSN Menon. The conclusions were that $A1C \geq 6.5$ may be used to screen high risk populations for type 2 diabetes, and to rule out diabetes in patients with incidental hyperglycemia, but is not so good for diagnosis of type 1 diabetes. Additionally, the cost and lack of availability of standardized assays are limiting factors in the Indian scenario. The second topic was 'Should we treat hyperglycemia in an ICU setting?' by Dr Warren Lee and Dr Rakesh Lodha. It was recommended that the glucose targets should be modest (110- 150 mg/dL), and standardized protocols should be in place for adjustment of insulin infusion rates, to prevent not only hypoglycemia but also excessive fluctuations in blood glucose.

In the closing session, Dr Ragnar Hanas provided an overview of the vision, mission, activities and membership of ISPAD. The meeting was well attended, and much appreciated.

Pre-Conference Workshop in Pediatric Endocrinology (with 41st Kerala PEDICON 2012)

M Vijayakumar, drmvijaycalicut@gmail.com

The Pediatric & Adolescent Endocrinology Chapter of IAP, in association with IAP Kerala, conducted a one day Pre-Conference workshop at Kabani Hall, Institute of Maternal & Child Health (IMCH), Govt. Medical College, Kozhikode, on 23rd November 2012 as a part of Kerala PEDICON 2012. Indeed it was the first ever Pediatric Endocrinology Workshop in the history of Kerala PEDICON!

Prof. Mohankumar, Superintendent, IMCH, inaugurated the workshop in the presence of Prof. A Riyaz, HOD, Department of Pediatrics and Dr Ajith Kumar VT, President, IAP Kozhikode. Prof PSN Menon, Dr Shobhakumar, Dr Ganesh Jevalikar, Dr Vijayakumar, Dr Reetha G and Dr Riaz conducted the workshop. It consisted of 4 work stations covering Growth, Thyroid,



Diabetes, and Pubertal disorders & DSD. Residents of the Dept. of Pediatrics, Calicut Medical College, presented clinical cases on precocious puberty, CAH, and diabetes. Prof Menon led the discussions. The workshop was well attended and the participants interacted actively. Dr Sachdananda Kamath gave away the certificates and mementos.

CME on Growth Disorders: Mumbai

Abhishek Kulkarni, abhidoc1981@gmail.com

On 1st December 2012, a 3 hour CME on Growth Disorders was organized collectively for the Pediatric Departments of all the ESIS / ESIC hospitals in Mumbai, conducted by Dr Abhishek Kulkarni, Pediatric

& Adolescent Endocrinologist, Jaslok Hospital, Mumbai. The emphasis was to sensitize the pediatricians at ESIS



Hospitals on the use of growth charts, appropriate approach to cases of short stature and indications & methodology of investigations. The lectures were followed

by an interactive session, with active participation of the delegates. It was attended by 40 pediatricians and 12 residents. The feedback obtained from delegates on post-lecture questionnaires was highly satisfying and indicated that the CME would have a beneficial impact on their day-to-day clinical practice. It was accredited for 2 credit hours by the Maharashtra Medical Council.

ESICON 2012: Kolkata

Anju Virmani

The 42nd Annual Meeting of the Endocrine Society of India was held at Kolkata from 13-15 December, 2012. The Organizing Secretary Dr Subhankar Chowdhury, the Scientific Secretary Dr Sujoy Ghosh and their team, did a wonderful job of combining science with hospitality. It was a tight schedule, of parallel sessions in 3 halls, with excellent talks, oral papers and posters. The pediatric content (especially on the last day) had several scintillating sessions covering bone health in children (Dr M Levine), pediatric Cushing (Dr M Savage), DSD (Dr A Chanda), congenital hypothyroidism (Dr M Desai), precocious puberty (Dr AC Ammini), neonatal hypocalcemia (Dr D Sanyal) and hypoglycemia (Dr R Khadgawat), growth charts (Dr V Khadilkar), obesity (Dr M Raychaudhri) and type 2 diabetes (Dr A Virmani), delayed puberty (Dr A Arya), and subclinical hypothyroidism (Dr K Seshadri). There were Meet the Professors sessions on CAH, rickets and Graves disease. Pearls from this meeting will be included in the next issue of CAPE NEWS.

CONGRATULATIONS!

Our member, Dr Rajesh Khadgawat, writes "... our paper **"The effect of growth hormone deficiency on size corrected whole body bone mineral content and bone mineral density in pre-pubertal children"** (published in Osteoporosis International 2012 Aug; 23 (8): 2211-7) has been selected for **"AIIMS Excellence Awards"**, by a selection committee headed by Dr Katoch, DG, ICMR. The award was given by the Health Minister on 25th September, Institute Day."

WORLD DIABETES DAY (WDD) EVENTS

14th November, World Diabetes Day, was celebrated across the country. We bring you glimpses of activities in Bangalore, Chandigarh, Chennai, Guwahati, Kanpur, Lucknow, Mumbai, New Delhi...

Indira Gandhi Institute of Child Health Bangalore

P Raghupathy, drp.raghupathy@gmail.com

An annual comprehensive refresher course was arranged along with observance of WDD on 5th November in IGICH Bangalore. There was enthusiastic participation from the 106 children with diabetes and their parents who attended the function. Prof. P Raghupathy, Head, Dept. of Pediatric Endocrinology, and his team of doctors, nurses and volunteers from IGICH conducted the program. Parents and children were educated about day-to-day management, and their questions and problems regarding low or high blood sugar values, sick day management, insulin action and adjustment of daily dose, self-monitoring of blood glucose at home, etc. were addressed in detail. News about advances in diabetes was also discussed. Nutritious, healthy, well-balanced meal planning was demonstrated, with clear explanations of all aspects of nutrition.

To make the occasion more memorable and lively, a painting competition for the children was held and prizes given. The children and parents actively took part in quiz competitions, testing their knowledge in diabetes, and bagging prizes. The children were entertained by a magic show, and also encouraged to take part in singing, dancing, fancy dress competition, etc.

All those who attended the function enjoyed the learning experiences, and relished the opportunity to participate in singing, dancing, narration of stories, etc. A board game ('snakes and ladders' incorporating ideas on diabetes management), strips indicating optimal rotation of injection sites, hypoglycemia kits (snack box and water bottle) were distributed to all the children. Such annual events have helped the children to develop self-confidence in managing diabetes by themselves, without dependence on their parents.

WDD @ PGIMER, Chandigarh

Sanjay Bhadada, bhadadask@rediffmail.com

The Dept. of Endocrinology, PGIMER Chandigarh; RSSDI Chapter of Chandigarh & Punjab; and ADITI (Association of Diabetes in Tricity) jointly organized a Walkathon for the public, athletes and patients of diabetes at Sukhna Lake, Chandigarh. This exciting event was supported by the Dept. of Physical

followed by a Yoga class.



A quiz was conducted on diabetes, diet, insulin storage and technique, disposal of insulin syringes, complications and their prevention, and sick day measures, and prizes distributed to the winners. We also arranged

for free insulin pen devices and refills, as well as glucometers for self monitoring. Finally these patients were encouraged to excel in academics as well as various social skills, for a brighter future.

WDD @ Regency Hospital, Kanpur

Anurag Bajpai, dr_anuragbajpai@yahoo.com

A support group meeting of children with T1DM and their parents organized at Regency Hospital on 9th Nov was attended by 50 children. Dr Rashmi Kapoor and Dr Anurag Bajpai elaborated on day-to-day management and underscored recent developments. Ms Shraddha Pandey, a recently selected undergraduate medical student with T1DM provided inspiration to the children and their families about their bright long term future.



WDD @ SGPGIMS, Lucknow

V Bhatia, bhatiaviji@gmail.com

WDD celebrations at SGPGIMS were on 3rd Nov, a little in advance of Nov 14th. The support group meeting was attended by 125 members of childhood onset diabetes families. Our teaching session centered around "Long term complications and their prevention" by DM student Dr Ramesh Gomez, "Stem cells for diabetes" by PDCC student Dr Kriti Joshi, and "Diet for toddlers and school children" by our dietitians Nirupama and Archana. While parents and older children were listening to "Stem Cells", our dietitians, aided by some of the older kids, supervised coloring and painting by the younger kids. A diabetes quiz (with a few general knowledge questions thrown in for good measure, like "Who is Malala Yousefzai?") prepared and conducted by DM students Dr Vipin VP and Dr Vignesh Gopalakrishnan, followed by lunch,



rounded off the pleasant meeting. We have had a rash of new patient admissions in recent months, and particularly those families were greatly reassured as the group had many families who had 10-40 years' experience of managing T1DM successfully. We remain ever grateful to those families who come more for supporting us and the new families, than to be supported themselves.

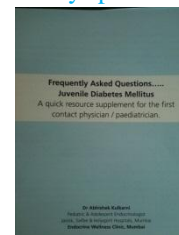
WDD @ Mumbai

Abhishek Kulkarni, abhidoc1981@gmail.com

A management camp exclusively for children with diabetes was organized at the Endocrine Wellness Clinic, Mumbai, on the occasion of WDD, by Dr Abhishek Kulkarni. 75 patients attended:



facilities like physical health examination, pediatric endocrine consultation, dietician's consultation, eye screening, and A1C assessment were provided free of cost to all of them. In addition, distribution of free glucometers, insulins, syringes, insulin pens and blood sugar monitoring strips, was also done to needy patients. Patients and their parents were briefed about the Dos and Don'ts in T1DM with special emphasis on importance of physical activity, prudent meal plan, sick day guidelines, detection, treatment and prevention of hypoglycemia. A FAQ leaflet addressing the most pertinent issues in the management of children with T1DM was distributed to patients and primary care physicians. The sheer motto of the camp was to make a small albeit, positive change in the life of children with T1DM.



WDD @ VMMC & SJ Hospital, New Delhi

Krishna Biswas, krisbis@rediffmail.com

A Diabetes Awareness Week was organized by Dr Krishna Biswas, Asst. Prof. & Head, Dept. of Endocrinology, in association with ISPAE, at Safderjung Hospital/ Vardhaman Mahavir Medical College (VMMC) from 5th November 2012, ending on WDD. It was inaugurated by Addl DG & Medical Superintendent, Dr BD Athani. Several activities were conducted: a Painting Competition, a Food Exhibition with diet advice, blood glucose checking,



opening of the Foot Clinic, and public lectures on



different complications. The Diabetic Foot Clinic and accompanying footwear exhibition was inaugurated on 6th November by the DGHS, Prof Jagdish Prasad. On 8th November, prizes for the painting competition

were given by Dr Jayashree Bhattacharyya, Principal, VMMC; each participating child was given a consolation prize and certificate of participation, along with insulin syringes, school bag and water bottle, which were sponsored by an NGO and the Hospital authorities. The food exhibition showed which foods are allowed, which may be taken in restricted amounts and which are prohibited. So, the exhibition showed samosas, cold drinks and a vodka bottle (empty, of course!). Diet counseling was done according to the requirement of the patients. On each day, random blood glucose checking (screening) was done and advice given accordingly. Public lectures were arranged every day.

WDD @ NOIDA, UP

IPS Kochar, inderpal_kochar@yahoo.com

A camp was organized on 11th Nov to make the children and parents aware of various insulins and glucometers available, how to use pen devices and insulin pumps. A



dietician gave them advice regarding diabetes. AIC was done free; other lab tests were available at discounted prices. Queries re diabetes were answered, and literature on diabetes distributed. A painting

competition (theme: World Diabetes Day) was held and prizes given for the best theme oriented painting.

FORTHCOMING MEETINGS

1. **PEDICON 2013:** 50th Annual Meeting of the IAP: Science City, Kolkata: 17-20 January, 2013. Organizing Secy: Dr Jaydeep Choudhry, www.pedicon2013.org
2. **ITSCON 2013:** Annual meeting of the Indian Thyroid Society: Bangalore: 16-17 February 2013. Contact Dr KM Prasanna Kumar, dr.kmpk@gmail.com
3. **PES 2013:** Annual Meeting of Pediatric Endocrine Society (USA) (formerly LWPES): Washington DC. 4-7 May, 2013.
4. **ENDO 2013:** Annual Meeting of the Endocrine Society: San Francisco, USA. 15-18 June, 2013. Email: societyservices@endo-society.org

5. **ESPE-PES:** 9th Joint ESPE/ PES Meeting: Milan, Italy: 19-22 September, 2013. Email: espe@eurospe.org
6. **ISPAD 2013:** 39th Annual Meeting: Gothenburg, Sweden: 16-19th October 2013.
7. **ESICON 2013:** 43rd Annual Meeting of the Endocrine Society of India: Bhopal: 18-20 October 2013. Organizing Secy: Dr Sushil Jindal, www.esicon2013bhopal.com
8. **IDF 2013:** World Diabetes Congress: Melbourne, Australia: 2-6 December 2013. Deadlines: abstract submission 22 April 2013; early registration: 14 June 2013. www.worlddiabetescongress.org
9. **PES 2014:** Annual Meeting of the PES: Vancouver, Canada. 3-6 May, 2014.
10. **ENDO 2014:** Annual Meeting of Endocrine Society: Chicago, USA. 21-24 June, 2014. Email: societyservices@endo-society.org
11. **ESPE 2014:** 53rd ESPE Meeting: Dublin, Ireland: 18-21 September, 2014. Email: espe@eurospe.org
12. **ISPAD 2014:** 40th Annual Meeting: Toronto, Canada.
13. **PES 2015:** Annual Meeting of the PES: San Diego, CA. 25-28 April, 2015.
14. **ENDO 2015:** Annual Meeting of the Endocrine Society: San Diego, CA. 20-23 June, 2015. Email: societyservices@endo-society.org
15. **ESPE:** 54th ESPE Meeting: Barcelona, Spain: 9-12 September, 2015. Email: espe@eurospe.org
16. **ISPAD 2015:** 41st Annual Meeting: Brisbane, Australia.
17. **PES 2016:** Annual Meeting of the PES: Baltimore, Maryland. 30 April-3 May, 2016.
18. **PES 2017:** Annual Meeting of the PES: San Francisco, California. 6-9 May, 2017.

MEMBERS' PUBLICATIONS

Desai MP, Mithbawkar SM, Upadhye PS, Shalia KK. Growth Hormone (GH1) gene deletions in children with isolated growth hormone deficiency (IGHD). *Ind J Pediatr.* 2012; 79:875-883

Thirty (M16) prepubertal IGHG patients age 0.25 to 14y, from 25 families were screened. Genomic DNA of patients and family was analyzed by PCR and DNA fragments were visualized on agarose gel electrophoresis. Frequency of GH-1 gene deletions (12/30) was 40%, and 54% among familial patients, and 31% with height SDS > -4. 83% had 6.7kb deletion. Height SDS > -4, clinical phenotype, peak GH < 1ng/ml and hypoglycemia characterized IGHG Type IA.