



# CAPE NEWS

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

[www.ispae.org.in](http://www.ispae.org.in)

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## PEARLS FROM ISPAE & PET '09

Ganesh Jewalikar & Bhanu Bhakhri, Delhi

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ISPAE recently organized its 1<sup>st</sup> biennial meeting in India Habitat Centre, New Delhi, and its 1<sup>st</sup> PET program in NOIDA, in Nov'09, in collaboration with European and Asia Pacific pediatric endocrine societies (ESPE, APPE). Meeting with the objectives of "learning, teaching, sharing and networking", we enjoyed listening to and interacting with 11 distinguished international and almost the entire esteemed Indian pediatric endocrine fraternity. ISPAE-PET, the first of its kind in India, was an intensive, interactive, wholly residential program aiming to provide up to date clinical training to young entrants in the field of pediatric endocrinology. On the following page are glimpses of these meetings, and below are a few 'take home messages' from the two events, useful for colleagues in general pediatric practice:

### Congenital thyroid screening

- Cord blood TSH is feasible and efficacious for CH screening.

### Neonatal hypoglycemia

- Neonatal hypoglycemia is most commonly transient, but may be prolonged in SGA babies.
- The commonest cause of persistent hypoglycemia is congenital hyperinsulinism.
- Insulin secreting adenoma is not a common cause of hypoglycemia in the neonatal period.
- DOPA-PET is an emerging technique to differentiate focal and diffuse forms of hyperinsulinism, but more data is needed to improve accuracy

### Craniopharyngioma

- Hydrocortisone is preferred over dexamethasone for perioperative steroid cover as dexamethasone may cause prolonged suppression of the HPA axis.

- Contd on page 3



## ISPAE WEBSITE

Have you seen our website?

[www.ispae.org.in](http://www.ispae.org.in). Please use it, send contributions, suggest changes and improvements for it, and inform others who are likely to find it useful.

## ISPAE MEETINGS

**ISPAE 2011:** Calicut, Kerala:

Nov, 2011. Organizing Secy:

Vijayakumar M. email:

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more details, see website.

**ISPAE-PET 2011 (Pediatric Endocrine Training program):**  
Calicut Nov 2011.

## SECRETARY'S MESSAGE

Dear members,

After the success of ISPAE 2009, our focus of ISPAE has shifted this year towards increasing educational activities and awareness about pediatric endocrinology. At present the plan is to hold ISPAE meetings biennially and to organize a regional CME in the intervening year to provide continuity of training to students especially those who have participated in PET.

The 2nd ISPAE Biennial Meeting will be held in Calicut, Kerala, at Calicut Towers: 25-27 November, 2011. It will be preceded by the PET program: 22-25 Nov 2011, similar to the first PET program organized in Delhi in 2009.

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# ISPAE 2009: A PHOTO FEATURE



Dr Panna Choudhry, President IAP, during the inaugural session. On the dias are (L to R) Dr Archana Arya (Secretary, ISPAE), Dr PSN Menon (Chairperson ISPAE 2009), Dr Franco Chiarelli (Secretary General, ESPE), Dr Maria Craig (APPES representative), and Dr Nalini Shah (President, ISPAE).



Pediatric Endo, like life itself, is a deft balancing act!



Sections of the audience



Dr SC Arya presenting Dr Meena Desai the Lifetime Achievement Award



Some of the PET organizers



Dr Meena Desai's 75<sup>th</sup> birthday cake: with Dr Praful Desai, who very kindly came specially for this!



One of the PET small groups: L>R Standing: S Bisht, S Bhattacharya, R Shastry, Vijaysarathi. Sitting: W Tantichattanon, V Bhatia, O Soder, R Sharma



**Craniopharyngioma...** (contd from page 1)

- Intracavitary yttrium is mainly important in the management of monocystic craniopharyngioma.

**Endocrine effects of cancer**

- Endocrine effects could be directly due to the cancer or indirect effects of the therapy.
- The chances of fertility following ovarian cryopreservation are poor.
- Testicular size is an important determinant of fertility.

**Growth and development**

- If current Indian data is used for calculating BMI centiles, the 75<sup>th</sup> centile should be taken as cut off for screening for overweight boys and girls.
- In obese youth, screening for insulin resistance with fasting glucose and insulin levels is as good as the time-and-resource-intensive OGTT.
- 5-10 % children with 'idiopathic' short stature may be having asymptomatic celiac disease.
- Prediction of adult height by bone age with current methods is often inaccurate. Final height is often underestimated in boys and overestimated in girls.
- Use of GnRH agonist or growth hormone in an otherwise normal short adolescent is not cost effective.
- Adequate intake of calcium and vitamin D is essential in adolescent growth. These should be evaluated routinely in a short adolescent.

**Polycystic ovary syndrome**

- Encouraging traditional Indian diet (neither western nor Indian junk foods) should be an important part of lifestyle changes (which is the best modality of treating PCOS, more effective than conventional medications).
- The adipose tissue expansibility hypothesis states that every individual has a set point for lipid accumulation in adipose tissue, increase beyond which is associated with lipid deposition in non adipose tissue and insulin resistance. This may explain why an obese woman may not have PCO phenotype, or why a lean woman may develop PCOS.

**Type 1 diabetes**

- Incidence of type 1 diabetes is increasing worldwide.
- Toddlerhood and adolescence are two critical phases in diabetes management.
- Insulin omission is very common in female adolescents who do not want to gain weight.
- There is no evidence to suggest that bicarbonate administration is necessary or safe during DKA.

**Disorders of sex development**

- Copy number variation analysis using whole genome arrays is a new tool to identify new genes involved in sex determination.

**Rickets, Vitamin D**

- Asymptomatic hypocalcemia in the newborn should be treated, as calcium plays a major physiological role in cellular functions.
- 80-90% infants less than 3 months of age in New Delhi are vitamin D deficient.
- Vitamin D deficiency is a major cause (~90%) of hypocalcemic seizures in infants.
- Vitamin D supplementation can be done equally well with daily, weekly or monthly dosing frequency.
- FGF-23 has a central role in renal phosphate handling. Causes of rickets associated with primary abnormalities of renal phosphate wasting are now being classified as FGF-23 mediated rickets.
- In X linked hypophosphatemic rickets, the biochemical hallmarks are normocalcemia & inappropriately normal/low levels of 1, 25 (OH)<sub>2</sub> D. The PTH levels are normal; however in some cases they may be mildly high. Concurrent Vit. D deficiency can cause high PTH levels.
- Type 2 Vit. D dependant rickets (due to resistance to action of calcitriol) is mostly but not always associated with alopecia.
- A biochemical picture of pseudo-hypoparathyroidism (low calcium, high phosphate and high PTH) can be seen in Vit. D deficiency, which must be ruled out in all such cases.

**Precocious puberty**

- Serial monitoring of auxological parameters and pubertal progression are the most important components of evaluation of precocity.
- In central PP, adequate suppression of gonadotropins can be achieved by 12 wkly or 4 wkly regimen of GnRH analog. If using leuprolide 4 wkly, the level of suppression is more with the 7.5 mg dose as compared to 3.75 mg, but adequate suppression is achieved with both. Hence in our scenario it is prudent to start with 3.75 mg 4 weekly or 11.25 mg 12 weekly.

**Steroids**

- No tapering is required if systemic steroids are used for a duration of less than 2 weeks.

**Journal Spice: from the Yearbook of Pediatric Endocrinology 2009**

*Veena Priyadarsini, veenapriyadarsini@gmail.com*

**Borderline thyroid dysfunction in children - watchful expectancy is worthwhile.**

Initial normal or slightly elevated TSH levels, done for nonspecific symptoms, in otherwise normal children, are likely to remain normal or spontaneously

normalize without treatment. This is based on the observation made by a team from Israel (Liora Lazar, Rachel Ben-David Frumkin, Erez Battat, Yael Lebenthal, Moshe Phillip, Joseph Meyerovitch) (Natural History of Thyroid Function Tests over 5 Years in a Large Pediatric Cohort. *JCEM* 94: 1678-1682, 2009). The purpose of the study was to determine the relative proportion of normal and abnormal thyroid function results in a pediatric population, the natural history of initial abnormal TSH levels in otherwise healthy children with no thyroid disease, and to define populations at greater risk for developing subsequent thyroid dysfunction.

The authors followed up 1,21,052 children of 1.043 million outpatients aged 0.5-16 years for a period of 5 years from 2002, excluding those with overt hypothyroidism or hyperthyroidism on initial screening. Results of 96.5% of initial serum TSH concentrations were normal (0.35-5.5 mIU/L), 0.2% were low (< 0.35), 2.9% elevated (>5.5 to ≤10), and 0.4% highly elevated (>10). During follow-up, repeated (2 to > 4) TSH tests were performed in 45.7% patients. In the second TSH determination, normal TSH was documented in 40%, 73.6%, and 78.9% of those whose initial serum TSH was highly elevated, elevated, and low, respectively, and in 97% of those with normal initial TSH. Throughout the 5 yr of follow-up, hypothyroidism requiring medical intervention was diagnosed in 0.4% of the cohort. This population constitutes 51.2% of patients with initial highly elevated TSH levels (>10 mIU/L) and 8.5% of patients with initial elevated TSH levels (5.5-10). Predictive factors for a sustained highly elevated TSH were initial TSH > 7.5 mIU/liter (p<0.014, 95% CI 1.334-12.577) and female gender (p < 0.047, 95% CI 1.009-4.172).

Thus the authors conclude that subclinical hypothyroidism is a benign and self limiting process in most children. However, TSH should be repeated every 6-12 months in those who are at risk for developing sustained thyroid dysfunction (i.e. initial abnormal TSH >7.5mIU/L and female gender). In patients with initial TSH between 5.0 and 7.5mIU/L, retesting may be done 3-5 years after the initial evaluation, if the patient remains asymptomatic.

**Yearbook Editor's comment: Be conservative in management of elevated TSH with a normal T4!**

**Treatment of hypovitaminosis D in infants and toddlers - 3 equally efficacious regimens**

In the light of rising incidence of hypovitaminosis D in young children, multiple regimens for

vitamin D supplementation (vitamin D2 or D3) have been recommended, pending data on the safety and efficacy comparisons. Single high dose oral vitamin D therapy (300,000 IU or 600,000 IU) have been reported to have resulted in hypercalcemia in infants. The only prospective study in infants and toddlers is described here. Catherine Gordon, Avery LeBoff Williams, Henry Feldman, Jessica May, Linda Sinclair, Alex Vasquez and Joanne Cox from Children's Hospital, Boston, did a randomized controlled study to compare the safety and efficacy of 3 common short-term treatment regimens of vitamin D, in raising serum 25(OH) vitamin D and lowering PTH (*JCEM* 93: 2716-2721, 2008). Forty otherwise healthy infants and toddlers with hypovitaminosis D (<20 ng/ml) randomly received one of three regimens, along with elemental calcium (50 mg/kg/d), for 6 weeks: 2,000 IU oral vitamin D2 daily; 50,000 IU vitamin D2 weekly, or 2,000 IU vitamin D3 daily. Baseline and post treatment 25(OH)D, PTH, calcium and alkaline phosphatase were measured. All the regimens approximately tripled the 25(OH)D concentration. Preplanned comparisons were non-significant: daily D2 vs. weekly D2 (12% difference in effect, p=0.66) and daily D2 vs. daily D3 (7%, p = 0.82). The mean serum calcium change was small and similar in the three groups. There was no significant difference in PTH suppression.

The authors conclude that treatment of hypovitaminosis D in children can be individualized with one of the 3 regimens, so as to ensure compliance, given comparable safety and efficacy. However because of the small sample size, the results of the study need to be generalized to the common population with caution.

**Probes, but not pulps, see better what the mind seeks.**

Increasing survival after childhood cancer therapy warrants effective means of monitoring for development of second malignancies. Craniofacial and upper thorax irradiation lead to increased risk for thyroid cancers. Present follow-up guidelines recommend only yearly thyroid gland examination in susceptible individuals and further tests (ultrasound/ FNAC) to evaluate palpable nodules. Although ultrasound screening for thyroid cancer in the general population is not cost effective and has low specificity, it has been found to be worthwhile in childhood cancer survivors by a group of investigators from Italy (Enrico Brignardello, Andrea Corrias, Giuseppe Isolato, Nicola Palestini, Luca Cordero di Montezemolo, Franca Fagioli and Giuseppe Boccuzzi, *JCEM* 93: 4840-4843, 2008). In this study 129 subjects who received craniofacial or upper thorax radiation for pediatric malignancies were followed up in



the transition unit for childhood cancer survivors and oncological emergency. Median follow up time since childhood cancer diagnosis was 15.8 yr (range 6.1 - 34.8). Thyroid ultrasound usually began 5 yr after radiotherapy and was repeated every third year, if negative. The median interval between the first tumor diagnosis and occurrence of thyroid carcinoma was 13.3 yr (range 8.9-27.9 yr). Thirty five patients had a solitary thyroid nodule, of which 14 were >1 cm. FNAC was done in 19. Papillary carcinoma was diagnosed by cytological examination in 5 of the patients, confirmed by histopathological examination after surgery. Only 2 of these 5 patients had a clinically palpable nodule: the remaining 3 had nodules <1cm, detected by ultrasound, with 2 of them having nodal metastasis by histopathology.

Thus the authors emphasize the need for long-term follow up of all childhood cancer survivors well beyond childhood and conclude that ultrasound screening in such a population is worthwhile in early detection and improved outcome of thyroid cancer.

#### **Cognitive function is disrupted by both hypo- and hyperglycemia in school children with type 1 diabetes.**

Widely fluctuating sugar values - both hypoglycemia and hyperglycemia - affect mental efficiency in children with type 1 diabetes (T1D). This interesting observation was made by **Linda Gonder-Frederick, John Zrebiec, Andrea Bauchowitz, Lee Ritterband, Joshua Magee, Daniel Cox and William Clarke** from University of Health Sciences Center, USA using a field procedure with personal digital assistant (PDA) technology, and the data published in *Diabetes Care* 32:1001-1006, 2009. A total of 61 children aged 6-11 years with T1D received a PDA programmed with two brief cognitive tests (mental math and choice reaction time), which they completed just before home glucose readings. The computer recorded time to complete each test and number of correct responses. Children completed several trials per day over 4-6 weeks for a total of 70 trials. Performance variables were compared across glucose ranges. Individual impairment scores (IISs) were also computed for each child by calculating the SD between performance during euglycemia and that during glucose extremes. Time to complete both mental math and reaction time were significantly longer during hypoglycemia. During hyperglycemia, time to complete math was significantly longer and reaction time was marginally significant ( $p = 0.053$ ). There were no differences on task accuracy. Decline in mental math performance was equivalent at glucose levels <3.0 and >22.2 mmol/l. IISs varied greatly across children, with no age or sex differences.

Thus the authors conclude that naturally occurring episodes of acute hypo- and hyperglycemia in daily life can cause cognitive-motor disruptions in school aged children with diabetes. The exact mechanism of such an effect is yet to be proven. The small sample size and short observation period of a homogenous Caucasian cohort limits generalization of the results, warranting more research, especially the effects of acute hyperglycemia on cognitive function in children.

#### **Puberty, contraception, and hormonal management for young people with disabilities.**

Caring for children and adolescents with disabilities is complex and multifaceted, with major concerns centering around menstrual issues, height outcome and peer and personal differences. **Margaret Zacharin** from Royal Children's Hospital, Melbourne, in her beautiful review article published in *Clinical Pediatrics* (2009; 48; 149) addresses these issues and outlines specific evaluation and detailed management strategies for female and male pubertal problems in the context of disability, including treatments for extreme pubertal delay or acceleration, menstrual management at different ages, contraceptive issues, and sexual function and choices for both sexes. Children with structural brain abnormalities are more prone for early puberty or delayed/ interrupted puberty.

**Delayed** pubertal development adversely affects bone mass acquisition and overall lifetime bone health. A short stimulatory course of sex steroids (estrogen/testosterone) to induce or assist progression of puberty improves bone density in such situations. Hyperprolactinemia, whether due to loss of hypothalamic inhibitory control or drugs (e.g. major tranquilizers or antidepressants), causing pubertal failure or regression, needs timely detection and appropriate treatment. Undescended testes due to neuromuscular disorders need surgical correction to reduce discomfort and the risk of future malignancy.

**Precocious** puberty due to structural brain abnormalities, more common in girls, causes great parental anxiety. Treatment strategies (GnRH analogues/progestogens) to switch off early/rapid progression of puberty in a girl child may be considered in such situations. Precocious puberty in boys with brain anomalies warrants thorough assessment to look for new underlying disorder like hypothalamic cyst or tumor.

Suppression of menstrual bleeding and **contraception** in children with severe physical/intellectual disability can be accomplished with continued use of OCPs, keeping in mind the increased risks of coagulation abnormalities due to immobility per se, worsened by OCPs. Other options include progesterone bearing IUD, Depo-Provera and low dose implantable progesterone. Fertility issues in disabled children should be managed on an individual basis depending on the extent of the physical/ intellectual disability.

Thus this review sincerely addresses few sensitive issues in a compromised group of children.

**Propylthiouracil (PTU) should no longer be the first line anti-thyroid drug in childhood Grave's disease.**

PTU and neomercazole (NMZ) are widely used as first line therapy for Grave's disease in children. There are multiple reports of PTU induced liver failure and deaths in children over the past 60 years. Although the occurrence of PTU induced liver failure may be 1 in 2000-4000, the number with reversible PTU-induced liver injury may be 10 times more. Moreover, routine LGTs are not effective in managing the risk of liver failure. NMZ use has not been reported to be associated with liver failure or other serious adverse events.

Based on observations from medical literature, adverse event reports from FDA, and data presented at a workshop at the Eunice Kennedy Shriver National Institute of Child Health and Human Development in October 2008 on safety of PTU in children, the authors (**Scott Rivkees, Donald Mattison**) suggest that PTU should not be prescribed as the first line anti-thyroid drug and alternative drugs should be considered in those who are on PTU. This has been published as Letters to the Editor in *NEJM* 360:15, 2009.

**Consensus Statement on the use of Gonadotropin-Releasing Hormone analogs (GnRHAs) in children.**

GnRHAs are the current drugs of choice in treatment of central precocious puberty (CPP). However there were no widely accepted guidelines as to the optimal use of these agents in CPP and other conditions. The Lawson Wilkins Pediatric Endocrine Society and the European Society for Pediatric Endocrinology convened a consensus conference to review the clinical use of GnRHAs in children and adolescents. The conclusions of the meeting were published in *Pediatrics* 2009;123:e752-762 (**Jean-Claude Carel, Erica Eugster, Alan Rogol, Lucia Ghizzoni and Mark Palmert**). Consensus Statement

on the Use of Gonadotropin-Releasing Hormone Analogs in children). There were 30 participants, equally representing North America and Europe, with an equal male/ female ratio, and a balanced spectrum of professional seniority and expertise. The US Public Health grading system was used to grade evidence and rate the strength of conclusions. When evidence was insufficient, conclusions were based on expert opinion. Participants were put into working groups with assigned topics and specific questions. Written material was prepared and distributed before the conference, revised on the basis of input during the meeting, and presented to the full assembly for final review. If consensus could not be reached, conclusions were based on majority vote. All participants approved the final statement.

**Conclusions:**

1. Progressive pubertal development and growth acceleration should be documented over a 3- to 6-month period before GnRHAs therapy, but not applicable for a child who is already at or past Tanner stage III (breast), particularly with advanced skeletal maturation (CIII).
2. Girls with onset of progressive CPP before 6 years of age benefit most in terms of height from GnRHAs. The decision to initiate therapy in girls with onset after the age of 6 should be individualized (BII). Treatment should be considered for all boys with onset of progressive CPP before 9 years of age who have compromised height potential (CIII). The use of GnRHAs solely to influence the psychosocial consequences of CPP or to delay menarche should be considered carefully given the absence of convincing data (CIII).
3. Adopted children with CPP should be treated no differently than non-adopted (CIII).
4. Basal LH levels are useful screening tests and may be diagnostic (BII). Although there are problems of assay variability and absence of pediatric normative data for basal and GnRH stimulated LH, a prepubertal limit of peak LH at 3.3 to 5.0 IU/L has been suggested.
5. Pelvic ultrasound is helpful in differentiating CPP from premature thelarche as an adjunct to GnRH stimulation (BII).
6. All boys with CPP and girls with CPP below 6 years of age should have a head MRI. In girls between 6-8 years with CPP, MRI decision should be individualized based on positive neurological findings & rapid pubertal progression



7. The choice of a particular GnRH analogue depends on patient and physician preference and on local marketing approval (CIII).

8. During treatment monitoring, GnRHA injection dates should be recorded and adherence with the dosing interval monitored (BII). Tanner stage and growth should be assessed every 3 to 6 months, and BA monitored periodically (BII). There was no consensus about the gonadotropins or sex steroids for monitoring therapy. For patients with suboptimal clinical response, there was consensus about need for comprehensive reassessment.

9. The addition of GH or oxandrolone to GnRHAs cannot be routinely recommended, pending validation by larger studies.

10. There is insufficient evidence to rely on any one clinical variable (chronological age, duration of therapy, bone age, height, target height, growth velocity) to make the decision to discontinue treatment (CIII). Therefore, it is reasonable to consider these parameters and informed parent and patient preferences, with the goal of menarche occurring near the population norms (CIII).

11. Routine use of GnRHAs for gonadal protection in children undergoing chemotherapy and increasing adult height in ISS, children born SGA, severe hypothyroidism, GHD and CAH cannot be suggested (CIII) as per the current evidence.

Thus the consensus group recognized that the efficacy of GnRHAs in increasing adult height is undisputed only in early-onset (girls <6 years old) CPP. Other key areas, such as the psychosocial effects of CPP and their alteration by GnRHAs, need additional study. Since only few controlled prospective studies have been performed with GnRHAs in children, many conclusions relied on collective expert opinion. The conference did not endorse commonly voiced concerns regarding the use of GnRHAs, such as promotion of weight gain or long-term diminution of bone mineral density.

The expert group concluded that use of GnRHAs for conditions other than CPP requires studies and cannot be recommended routinely.

### **SECRETARY'S MESSAGE**

- contd from page 1

It will be preceded by the PET program: 22-25 November, 2011 similar to the first PET program in Delhi in

2009. We are lucky to have Dr Vijayakumar as the Organizing Secretary for this meeting. The good news is that ESPE will be supporting this meeting as they had supported the earlier one by sending speakers for PET and the conference. The progress report of this meeting is below, further information will be updated on our website regularly.

We hope our members in different regions of the country will also organize CMEs and other programs under the banner of ISPAE to disseminate knowledge. Satellite CMEs would also be held along with IAP in smaller towns.

One of ISPAE's objectives is to promote education and formal training in pediatric endocrinology in India. The Society is working towards setting up fellowships in pediatric endocrinology at the major pediatric endocrinology centers in India to produce competent specialists. A one year fellowship course in Pediatric Endocrinology has been running for several years at Sanjay Gandhi Post-Graduate Institute of Medical Sciences (SGPGI), Lucknow, under Dr Vijayalakshmi Bhatia and Dr Preeti Dabadghao. Recently a one year course was started at **Bharatiya Vidya Peeth, Pune** under Dr Vaman Khadilkar. Dr. Sudha Rao of Wadia Hospital, Mumbai will also shortly be starting a similar fellowship program. We hope other centers will set up such similar fellowships with uniformity in the curriculum and examination.

Clinical Practice Guidelines for common pediatric endocrine disorders are being written, to provide uniformity of management amongst pediatricians. These guidelines would be focusing on our population and problems faced in our country. The guidelines on "Type 1 Diabetes Mellitus" and "Obesity" are being prepared under the able guidance of Dr Aspi Irani and Dr Subrata Dey respectively. We hope to release them sometime in the middle of the year.

Another new initiative is that ISPAE will be a part of a Global Pediatric Endocrinology and Diabetes (GPED) forum. Our representatives would be active members of GPED. Details of our involvement are being worked out and we will keep you informed about further developments.

I would like to welcome all of the new members! We also welcome inputs from all members so that we can improve our Society and its contribution towards increasing awareness about pediatric endocrinology in our country.

Best wishes!  
Archana D Arya

### **ISPAE 2011, PET 2011: PROGRESS REPORT**

*M Vijayakumar, Organizing Secretary*

The 2<sup>nd</sup> Biennial ISPAE Conference (ISPAE 2011) & Pediatric Endocrine Training (PET 2011) program are to be

April 2010

held at Calicut, Kerala. The main conference will be held on 25-27 November 2011, at CALICUT TOWERS. The PET program will immediately precede this, on 22-25 Nov 2011. The local Executive Committee has been meeting regularly since the first meeting held on 6<sup>th</sup> January 2010. A bank account has been opened, and seed money received. The first brochure is being prepared, and will be circulated to all of you soon. Details of the meeting and about Calicut will also be put on our website shortly. We all look forward to welcoming you in Calicut in 2011!

### MORE ISPAE NEWS

#### NEW MEMBERS: A VERY WARM WELCOME!!

1. Dr SRIDHAR BATHULA, Hyderabad
2. Dr RAJIV GARG, Gaziabad
3. Dr SHALMI MEHTA, Ahmedabad
4. Dr V MOHAN, Chennai
5. Dr V SRI NAGESH, Hyderabad
6. Dr SRIDEVI PALADUGU, Hyderabad
7. Dr AMIT TYAGI, Delhi

### CHARITY ACTIVITIES

ISPAE is mandated to conduct some charity activities through its members, apart from educational activities.



Dr A Virmani received Rs 6000 which was used to purchase insulin, glucometer strips, and Vitamin D to be used for poor diabetic and thalassemic children in Sidhbari (Himachal Pradesh), Faridabad, and Delhi.



The interest earned on fixed deposits during this financial year was sent to Dr Sahul Bharti in Himachal Pradesh.

We welcome other members to similarly let us know of their charitable activities, and if possible route them thru ISPAE.

### CALICUT MEETING

*M Vijayakumar, Calicut*

A Pediatric Endocrinology CME program was held on 14 March 2010 at Institute of Maternal & Child Health, Medical College (IMCH-MC), Calicut, organized by the Pediatric & Adolescent Endocrinology Chapter of IAP and IAP Calicut. The program was inaugurated by Dr KC Rajagopal, former Professor & Head, Dept of Pediatrics, Medical College, Calicut, and presided by Dr TP Asharaf, Superintendent, IMCH-MC. Prof V Bhatia, Department of Endocrinology, SGPPI, Lucknow, delivered a talk on neonatal thyroid screening and interpretation of thyroid function tests. She also moderated a session in which post graduate students of Calicut Medical College presented brief case reports of precocious puberty, short stature, congenital adrenal hyperplasia and McCune Albright syndrome. There was lively discussion, and the session was greatly enjoyed by all.



### MUMBAI MEETING

*Ashok Ahire & Sudha Rao, Mumbai, [c\\_sudha@hotmail.com](mailto:c_sudha@hotmail.com)*

A Pediatric Endocrinology CME was held at Dr SM Merchant Auditorium, Bai Jerbai Wadia Hospital for Children on 28<sup>th</sup> March 2010 under the auspices of IAP Mumbai Branch. There were 153 delegates from in and around Mumbai- practicing pediatricians, pediatric medicine residents, and adult endocrinology residents. This CME was unique as all the topics were elucidated through interactive clinical case scenarios by a galaxy of national experts.

The session started with growth disorders. **Dr V Khadilkar** described the techniques of anthropometric measurements, interpretation of measurements, and nuances of different growth charts. He emphasized that all pediatricians must use growth charts and Tanner staging routinely in their office practice. **Dr Prisca Colaco** discussed case scenarios of short stature and gave an algorithmic approach to the problem. She emphasized that in a short child, low weight for height suggested an underlying systemic illness, while normal weight for height suggested an endocrine cause. **Dr Nalini Shah** explained various



endocrine problems in adolescents through case capsules, including an informative discussion of a case of celiac disease causing delayed puberty and short stature.

**Dr MP Desai**, who had started the first ART (After Radiation Therapy) Clinic in India at Tata Memorial Hospital, spoke on endocrine effects of childhood cancer and cancer therapy. She emphasized the need for improving quality of life with anticipation and prevention of problems, now that cancer survival is better, and drawing on her vast experience detailed the emotional and psychosocial effects.

**Dr Aspi Irani** discussed diabetic ketoacidosis, proposing “Ten Commandments” in its management! He also elucidated sick day management and office management of T1DM. **Dr Sudha Rao** gave a practical approach to hypoglycemia, and pointed out that hyperinsulinism is the most important cause of refractory hypoglycemia in neonates. She also elucidated the various causes of hyponatremia and explained through case capsules the difference between cerebral salt wasting and SIADH.

**Drs Anju Seth** and **A Khadilkar** discussed calcium and Vitamin D (Vit D) metabolism. Dr Seth explained that the commonest cause of seizures in infancy is hypocalcemia secondary to Vit D deficiency (VDD), often due to subclinical maternal VDD. She proposed strategies for its prevention by supplementing vulnerable infants. Dr Khadilkar discussed various causes of VDD in our sun rich country and the dietary management of calcium deficiency.

**Dr Sudhir Sane**, an eminent pediatrician from Thane, conducted an ingenious and interactive panel discussion through case scenarios, discussing topics as diverse as congenital hypothyroidism, newborn thyroid screening, premature adrenarche, hypoparathyroidism, and osteogenesis imperfecta, which was most enjoyed.

The CME was a grand success because of the active participation of the audience, Dr Desai’s guidance throughout the program, and the hard work of **Dr Shivkumar Lalwani** (co-organizing secretary) and the other organizing team members – Drs Aparna Limaye, Garima Mishra, Shilpa Borse, Neha Shah, Aarti P, Sujit C, Ashok Ahire, Anil Patil, Pravil Kale and Mrs Asha Sharma.



## OUR MEMBERS' PUBLICATIONS

*[Editor's note: Please send us information, and even a short summary of your recent publications.]*

Anjana RM, Lakshminarayanan S, Deepa M, Farooq S, Pradeepa R, Mohan V. Parental history of type 2 diabetes mellitus, metabolic syndrome, & cardiometabolic risk factors in Asian Indian adolescents. *Metabolism Clinical & Experimental*. 2009; 58: 344–350.

Batra CM, Gupta N, Atwal G, Gupta V. Transient neonatal diabetes due to activating mutation in the ABCC8 gene encoding SUR1. *Indian J Pediatr* (IJP) 2009; 76: 1169-72

Bharath R, Unnikrishnan AG, Thampy MV, Anilkumar A, Nisha B, Praveen VP, Nair V, Jayakumar RV, Kumar H. Turner syndrome and its variants. *IJP* 2010; 77: 193-195

Borkar VV, Devidayal, Verma S, Bhalla AK. Low levels of vitamin D in North Indian children with newly diagnosed type 1 diabetes. *Pediatric Diabetes* 2009.

Ekbote VH, Khadilkar AV, Mughal MZ, Hanumante N, Sanwalka N, Khadilkar VV, Chiplonkar SA, Kant S, Ganacharya R. Sunlight Exposure & Development of Rickets in Indian Toddlers. *IJP* 2010; 77: 61-65.

Ganesh HK, Acharya S, George J, Bandgar T, Menon PS, Shah N. Pheochromocytoma in children & adolescents. *IJP* 2009;76:1151-3

Gayathri SB, Radha V, Vimalaswaran KS, Mohan V. Association of the PPARGC1A Gene Polymorphism With Diabetic Nephropathy in an Asian Indian Population (CURES-41). *Metabolic Syndrome and Related Disorders*. 2009 Nov 9. [Epub ahead of print].

George J, Acharya S, Bandgar T, Menon PS, Shah NS. Primary hyperparathyroidism in children & adolescents. *IJP* 2010; 77: 175-8

Hari Kumar KVS, Verma A, Modi KD, Rayudu BR. Precocious puberty and pineal cyst – an uncommon association. *Indian Pediatr* 2010; 47: 193-4

Jain V, Sharma R, Verma S, Agarwal R. Fetal euthyroid goiter. *IJP* 2009; 76: 1259-60

Khadilkar VV, S. Rajadhyaksha S, Khadilkar AV. Maternal hypovitaminosis D with neonatal convulsions. *IJP* 2010; 77: 111

Muthukrishnan J, Harikumar KVS, Verma A and Modi K. Central Hypothyroidism. *IJP* 2010;77: 94-96

Mohan V, Vijayachandrika V, Gokulakrishnan K, Anjana RM, Ganesan A, Weber MB, Venkat Narayan KM. HbA1c cut points to define various glucose intolerance groups in Asian Indians. *Diabetes Care*. 2009 Nov 10. [Epub ahead of print].

Radha V, Ek J, Anuradha S, Hansen T, Pedersen O, Mohan V. Identification of novel variants in the hepatocyte nuclear factor 1 alpha gene in south indian patients with maturity onset diabetes of young. *JCEM* 2009; 94: 1959 -65.

Radhika G, Dam RMV, Sudha V, Ganesan A, Mohan V. Refined grain consumption and the metabolic syndrome in urban Asian Indians – Chennai Urban Rural Epidemiology Study (CURES – 57). *Metabolism Clinical and Experimental*. 2009; 58: 675–681.

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Sharma S, Jain V. Bilateral breast enlargement in a male toddler: An unusual case. Indian J Pediatr 2009; 76: 1164-6.

Somannavar S, Ganesan A, Deepa M, Datta M, Mohan V. Random capillary blood glucose cut points for diabetes and pre-diabetes derived from community based opportunistic screening in India. Diabetes Care, 2009; 32: 1-2.

**FORTHCOMING MEETINGS**

1. **PAG 2010:** 16<sup>th</sup> World Congress of Pediatric & Adolescent Gynecology: Montpellier, France: 22-25 May 2010. Contact: Prof Charles Sultan, [www.fiqj2010.com](http://www.fiqj2010.com).
2. **ISBMR 2010:** 6<sup>th</sup> Annual Conference of the Indian Society Bone & Mineral Research: AIIMS, New Delhi: 13-14 Aug 2010. Contact: Brig Satish Kukreja, [isbmrindia@gmail.com](mailto:isbmrindia@gmail.com).
3. **ISBMR 2<sup>nd</sup> Bone Densitometry Course:** INMAS, New Delhi: 11-12 Aug. Contact: Brig Satish Kukreja, [isbmrindia@gmail.com](mailto:isbmrindia@gmail.com).
4. **ISPAD 2010:** 35<sup>th</sup> Annual Meeting of the International Society for Pediatric & Adolescent Diabetes: Buenos Aires, Argentina: 5-11 Sep 2010. Contact: Olga Ramos, [ramoso@interlink.com.ar](mailto:ramoso@interlink.com.ar). Also see *Letters*
5. **ESPE 2010:** 49<sup>th</sup> Annual Meeting of the European Society of Pediatric Endocrinology: Prague, Czech Republic: 22-25 Sep 2010. [www.espe2010.org](http://www.espe2010.org)
6. 4<sup>th</sup> International Congress on **Prediabetes and Metabolic Syndrome:** Madrid, Spain: 6-9 April, 2011. [www.kenes.com/prediabetes](http://www.kenes.com/prediabetes).
7. **Endocrine Society (USA) 2010:** San Diego, 19-22 June, 2010.
8. **Endocrine Society (USA) 2011:** Boston, Mass, 4-7 June, 2011.
9. **ESPE 2011:** 50<sup>th</sup> ESPE Meeting: Glasgow, Scotland: 25-28 Sep, 2011.
10. **EASD 2011:** 47<sup>th</sup> Annual meeting: Lisbon, Portugal: 12-16 Sep, 2011.
11. **ISPAD 2011:** 36<sup>th</sup> Annual Meeting: Miami, USA: 19-22 Oct 2011.
12. **ISPAE 2011:** 2<sup>nd</sup> Biennial Meeting: Calicut, Kerala: Nov 2011. Contact: M Vijayakumar, [vijayakumarmdr@yahoo.com](mailto:vijayakumarmdr@yahoo.com)
13. **ESI 2011:** Pune (dates not fixed).
14. **ESPE 2012:** 51<sup>st</sup> ESPE Meeting: Leipzig, Germany: 20-23 Sep, 2011.
15. **ESPE-LWPES:** 9<sup>th</sup> Joint ESPE/ LWPES Meeting: Rome, Italy: 18-21 Sep, 2011.

**LETTERS/ NEWS YOU CAN USE**

**Dear Friends,**

As President of the Local Argentine Committee I have the pleasure of inviting all members of ISPAD to the 36<sup>o</sup> Meeting, that will take place in Buenos Aires from 27<sup>th</sup> to 30<sup>th</sup> October, 2010. All information regarding the meeting can be seen on our web site at [2010.ispad.org](http://2010.ispad.org). I look forward to seeing you all to share scientific sessions in a friendly atmosphere and I hope, nice spring weather. Best regards, **Olga Ramos, Conference President**

PLEASE NOTE THE FOLLOWING IMPORTANT DATES:

- Start of Registration March 2nd, 2010
- Start of Abstract Submission March 2nd, 2010
- Abstract & Travel Grant Submission Deadline June 1st, 2010
- Early Registration Fee Deadline June 15th, 2010
- Standard Registration Fee Deadline September 1st, 2010
- Online Registration Deadline October 15th, 2010.

**Call for Abstracts**

We are pleased to announce that abstract submission for the 4<sup>th</sup> International Congress on Prediabetes and the Metabolic Syndrome (Madrid, Spain: 6-9 April, 2011) is now open. Participants are invited to submit abstracts for oral and poster presentations via the Congress website before Thursday, November 18, 2010.

***Do you have any suggestions as to how I can get Prader Willi diagnosed in our setting?***

The Fluorescence in situ hybridization [FISH] can be done in our lab (in SGPGI) and it detects PWS due to microdeletions [in about 70% cases of PWS]. For the rest [PWS due to imprinting abnormalities and uniparental disomy] the methylation test is done in Dr IC Verma's dept at New Delhi. Of course a routine karyotype should be done in all cases.

*Prof Shubha Phadke, Department of Medical Genetics, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow. [Dr Phadke is also Editor of Genetics Clinics, the newsletter of the Genetics Chapter of IAP.*

**Obituary: Prof Kenji Fujieda**  
*PSN Menon & Nalini Shah*

ISPAE expresses sincere condolences on the passing away of **Professor Kenji Fujieda**, President of the Japanese Society for Pediatric Endocrinology (JSPE), on March 19, 2010. His sad demise leaves a big vacuum in the Japanese as well as Asian pediatric endocrine community. May his soul rest in peace!

