



# 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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## "Win or Lose? The Choice is Yours!"

### Psychological Aspects of Diabetes Care during Adolescence

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Young, energetic, and adventurous - adolescents are a handful for many parents. Undergoing immense physical changes, they are in a stage of learning and moving slowly into adulthood. Chase (2006) describes adolescence as a stage where one varies between wanting to be a child and wanting to be an adult. There are many shades between these two extremes and this shift may go on for quite some time. Adolescents are known to seek active life experiences, test their abilities ...

Contd on page 5

## SECRETARY'S MESSAGE

Dear ISPAE members,

This is now time for the next report of our academic, scientific and patient related activities in the past 4 months: and we have been very busy! In accordance with our R&R, ISPAE spends a significant proportion of its income each year for charity and educational activities. The educational activities so far...

... Contd on page 2.



### ISPAE WEBSITE:

[www.ispae.org.in](http://www.ispae.org.in): Check it out!

**ISPAE 2011:** Calicut: 25-27 Nov.

**ISPAE-PET 2011:** Calicut 22-25 Nov. Organizing Secretary:  
Vijayakumar M. email:  
[drmvijaycalicut@gmail.com](mailto:drmvijaycalicut@gmail.com)

### PEDIATRIC ENDOCRINE

### WORKSHOP 2012: ESIC

Hospital, Gurgaon: 18 Jan 2012.  
Org. Secretaries: Dr G Javalikar & Dr Sapna Mittal. See:  
[pedicon2012@gmail.com](mailto:pedicon2012@gmail.com).

**PEDICON 2012:** 49<sup>th</sup> Annual IAP

Conference: Gurgaon: 19-22 Jan 2012. Org. Secy.: Dr Mahaveer P Jain; [info@pedicon2012.com](mailto:info@pedicon2012.com); [pedicon2012@gmail.com](mailto:pedicon2012@gmail.com).



### INSIDE THIS ISSUE

1. Psychological care of diabetes during adolescence: Assoc. Prof Jyoti Kakkar
2. Secretary's Message, progress report ISPAE & PET 2011, welcome to new members
3. ISPAE Website, charity activities
4. APPES News, Pedendoscan
5. More news, forthcoming meetings, including PEDICON 2012, Workshop, Notes & News
6. Case vignette, Answers to Quiz

**SECRETARY'S MESSAGE** *Contd from page 1.*

... have included conducting the Biennial meeting and PET (pediatric endocrine training program), publishing practice guidelines on specific diseases, organizing patient and physician education, and running this newsletter (CAPENEWS) and maintaining the ISPAE website with educational content and for communication.

As you can see on the front page, we now have new teams for CAPENEWS and the website, formed after inviting applications from all of you:

i. **Editorial board of CAPENEWS:** Editor Dr A Virmani; Members: Drs A Bajpai, B Bhakhri, G Jevalikar, SK Patnaik, L Priyambada.

ii. **ISPAE Website Team:** Webmaster: Dr K Ravikumar; Members: Drs V Bhatia, G Jevalikar, SK Patnaik, L Priyambada.

In response to the invitation to all members for a formal expression of interest to hold the next Biennial Conference of ISPAE, i.e. **ISPAE 2013**, Dr Shaila Bhattacharya has offered to hold it in Bangalore. The progress of **ISPAE 2011** and **ISPAE-PET 2011** is reported below. You would have recently received the second brochure. The last date for sending **abstracts** (only by email) is **15<sup>th</sup> September**. Please do hurry up and send your abstract soon! We would be having our **Annual GBM** during the course of the meeting. The formal notice would be sent to you in October.

The next **PEDICON 2012** is in Gurgaon. Dr Jevalikar is on the Organizing Committee. Thanks to the efforts of Dr Sapna Mittal and Dr Jevalikar, a Preconference Workshop in pediatric endocrinology has been allotted to us after a gap of 2 years. You would have heard from them directly recently with the details, which are also elsewhere in the newsletter.

With almost 30 new members, our **membership strength** now stands just under 280, a healthy mix of pediatric endocrinologists, pediatricians interested in endocrinology, and adult endocrinologists. I **sincerely welcome** all of you! You would be able to check your membership number on the website, which should help us all to stay in contact with one another. For any problems, please contact Dr Preeti Dabaghao.

The process of conferring **Honorary Membership** of ISPAE has been finalized, and the first two very eminent recipients are Drs Gary Warne and Margaret Zacharin. They will be honored during ISPAE 2011 in Calicut. Dr Anna Simon is handling this activity.

The **ISPAE Travelling Fellowship** has been initiated. I will be writing to all of you in detail very soon. I request our young members to apply, and our senior members

to spread the word to those of their junior colleagues who are interested in the field.

**IAP and WHO** are collaborating on preparing an **Essential Medicines list**. Our speciality's section was prepared by Dr Sudha Rao with the help of Dr Jevalikar, and inputs from many ISPAE members. After incorporating feedback from Dr Gitanjali Batmanabane from WHO, a modified list was discussed amongst the members and addition of various medications were suggested. Most prominent of them were 100 U/ml insulin, 50 mcg strength of thyroxin, and sachets/ injections of cholecalciferol.

In addition, Drs Sudha Rao, Vandana Jain, Shaila Bhattacharya, and Anurag Bajpai, are currently working under Dr Menon's guidance, on behalf of our Chapter, on revising the **IAP Pediatric Drug Formulary** to bring out the 2012 edition.

Dr Nalini Shah and Dr Sudha Rao are editing a book "**Clinical Pediatric Endocrinology for Practicing Pediatricians**", which is to be part of the "IAP Specialty Series". This is now close to publication.

On the international front: Our relationship with **APPES** grows in strength. Our two nominees Dr N Shah and Dr V Bhatia have given a detailed report below.

An ESPE sponsored International **Consensus Meeting on Congenital Hypothyroidism** is being held in Rome on 28-29<sup>th</sup> Nov. 2011. Dr P Raghupathy and Dr Anna Simon have been nominated by the Executive Council to attend it on behalf of ISPAE.

As you know, we are in constant e-touch with all of you members. Therefore if there is any change in your **email id**, please let Preeti or me know immediately. If you have not heard from us for a few weeks, please write to us to find out why emails are not reaching you.

We look forward to actively partnering with all of you in furthering the interest of pediatric endocrinology in India. Please do send us your suggestions.

With warm regards  
Anju Seth

**ISPAE 2011, PET 2011, Calicut: Progress Report**  
*M Vijayakumar, Organizing Secy, drmvijaycalicut@gmail.com*

Greetings from Calicut (Kozhikode), the venue of the 2<sup>nd</sup> Biennial Conference of ISPAE & ISPAE-PET 2011!

Preparations for both ISPAE-PET 2011 and ISPAE 2011 are in full swing. The venue for both events has been shifted to Kadavu Resorts, situated 15 km from the Calicut

(Kozhikode) International Airport on Calicut Bypass Road, on the bank of the Chaliar River.

As far as PET (22-25 November) is concerned, the 36 participants have been selected, and informed. Details of this exacting program are reported separately. A huge amount of work is going into its organization, and we are all excited by the interest it has generated.

For the main meeting (25-27 November), so far 156 delegates have registered. The scientific program has been finalized (for details see website). The international faculty includes Dr Franco Chiarelli (Chieti, Italy), Dr Ze'ev Hochberg (Haifa, Israel), Dr Jean-Claude Carel (Paris, France), Dr Olaf Hiort (Lubeck, Germany) (all sponsored by ESPE), Dr Reiko Horikawa (Tokyo, Japan: sponsored by APPES), Dr Fauzia Mohsin (Dhaka, Bangladesh), Dr Heiko Krude (Berlin, Germany) Dr Garry Warne and Dr Zacharin (both Melborne, Australia). The second brochure would have reached you a few days ago. The last date for abstract submission is 15<sup>th</sup> September. Major pharmaceutical companies supporting the meetings include Novo Nordisk, LG Life Sciences, Hologic, Ranbaxy, Pfizer, Lilly, Medtronic, and Merck-Serono.

Updated details are available at our website [www.ispae.org.in](http://www.ispae.org.in).



#### **ISPAE-PET 2011, Calicut: Progress Report**

*Dr Anju Seth & Dr Bhanukiran Bhakri*

After the huge success of ISPAE-PET 2009, the first ever residential training program in India of its kind, PET 2011 is all set to be a refined successive edition. Conducted in the quiet environment of the outskirts of Calicut, the 3:1 participant faculty ratio will ensure maximum interaction, discussion and learning.

The faculty and participant list has been finalized. The response to the invitation for applications was enthusiastic. We received about 70 applications, of which the steering committee selected 36, with 5 on the waiting list. All applicants were informed about the result of the selection process, which was also posted on the website. The scientific contents and the program details are being developed. All the participants selected have been asked to

become members of ISPAE if they are not so already. The faculty includes Drs Jean-Claude Carel, Olaf Hiort, Reiko Horikawa, Heiko Krude, and Margaret Zacharin, as well as Drs Vijayalakshmi Bhatia, Vaman Khadilkar, PSN Menon, P Raghupathy, Anju Seth, Nalini Shah, and Anna Simon.

The program is divided into 12 case-based sessions with a quiz towards the end. Sessions are either 1.5 hours long with 3-4 cases, or 1 hour long with 2 cases. Each session would cover an area of pediatric endocrinology, moderated by one faculty member, who will also give a related talk, weaving in the cases. Apart from the usual topics covered (growth, puberty, etc.) separate sessions have been planned for endocrine hypertension, water balance and hypoglycemia, to emphasize their importance in pediatric endocrine practice. The 36 participants selected comprise of a mix of young pediatric faculty already running or desirous of establishing pediatric endocrinology clinics in their institutions, practicing pediatricians already interested in pediatric endocrinology, and DM endocrinology trainees. They have been divided into 6 groups mentored by 2 faculty members each. Each participant has been allotted a case, to be prepared in advance under the guidance of the 2 group mentors, for presentation and discussion during the relevant session.

PET thus involves intensive academic rigor before and during program; it also gives all a chance to enjoy the scenic beauty of Kerala, and have fun on the backwaters! Participants get time to interact intensively with mentors and each other, so lasting friendships can be formed. This would foster future collaborative interaction, research and clinical care, over the years to come.

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

1. **Dr SAMIR AGGARWAL, Rohtak**
2. **Dr RAMJI BHARATH, Chennai**
3. **Dr SWETA R BUDYAL, Mumbai**
4. **Dr SACHIN CHITTAWAR, Delhi**
5. **Dr ARUNDHATI DASGUPTA, Guwahati**
6. **Dr KHALID J FAROOQUI, Srinagar**
7. **Dr PARESH CHANDRA GHOSH, Chennai**
8. **Dr YASHDEEP GUPTA, Mohali**
9. **Dr JUBBIN JAGAN JACOB, Ludhiana**
10. **Dr VIJAY KUMAR JAISWAL, Meerut**
11. **Dr NEHA JOSHI, Delhi**
12. **Dr MADHURIMA KANDEPU, Kakinada**
13. **Dr SARALA KANNAN, Jamshedpur**
14. **Dr PRATAP DIWAKAR KINI, Ernakulam**
15. **Dr SUNIL KUMAR KOTA, Hyderabad**
16. **Dr RAKESH KUMAR, Chandigarh**
17. **Dr SANTOSH KUMAR, Mumbai**
18. **Dr SONIA MAKHIJA, Delhi**
19. **Dr RAJNEESH MITTAL, Bangalore**

- 20. Dr SACHIN SURESH MITTAL, Khanna, Pb**
- 21. Dr NIJAGUNA NANJUNDAPPA, Bengaluru**
- 22. Dr PRATIBHA S PAWAL, Beed**
- 23. Dr HEMCHAND KRISHNA PRASAD, Chennai**
- 24. Dr SUCHETA RAO, Mangalore**
- 25. Dr POONAM SINGH, Navi Mumbai**
- 26. Dr RAJIV SINGLA, Delhi**
- 27. Dr RASHMI S THANVI, Ahmedabad**
- 28. Dr SEANY T VARGHESE, Adur, Kerala**
- 29. Dr KK YATHESHTAN, Kasargod**

**Members with only rediffmail email ids:** please note. These sometimes bounce when emails are sent from gmail accounts. If you have an alternative id, please let me know. Thank you! Ed.

### **ISPAE Website Development**

Karnam G Ravikumar, [ravikarnam@doctors.org.uk](mailto:ravikarnam@doctors.org.uk)

Since May 2011, the new web team, elected by the ISPAE Executive Council, and consisting of Dr KG Ravikumar as Webmaster and Drs V Bhatia, SK Patnaik, Leena Priyambada and Ganesh Javalikar as members. The tasks include continuing the maintenance & updating work on the website previously done by Dr Bhatia and Mr Vivek Saigal and improving it with added features.

As part of the new initiatives, a discussion forum is being created within the website. The address is [www.forum.ispae.org.in](http://www.forum.ispae.org.in) or [www.ispae.org.in/forum](http://www.ispae.org.in/forum). There is also a link to the forum from the main page of ISPAE website.

#### *ISPAE Discussion forum*



ISPAE members can register themselves at the forum using their registered e-mail ID. Please choose the username that is easily identifiable. The rules & guidelines are displayed on the forum. The forum will be used to discuss various issues including case discussions, clinical guidelines, ISPAE activities etc. Active participation is expected from members so that the useful discussions can be sustained.

### **CHARITY ACTIVITIES**

*Anju Seth*

In accordance with our R&R, ISPAE spends a significant proportion of its income each year for charity and educational activities. Charity activities include (a) using a part of our interest earned from fixed deposits, to reimburse charity activities of the Society, including those by the members in the said calendar year, and (b) encouraging individual members to motivate donors to donate to the Society for pediatric endocrine related activities (availing 50% income tax exemption under section 80 G).

The Executive invites members who want to apply for reimbursement under process (a) for the calendar year 2011. The amount allocated for this is small at present, Rs 25,000. The member must show evidence of the charity activity conducted by him/ her, in the form of a short write up and photographs (by email). Last date for application is December 10th 2011, giving enough time for the Charity Committee to evaluate applications and award the amount by the financial year end.

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

**Dr Radhika Muzumdar**, Assoc. Prof. of Endocrinology at Children's Hospital at Montefiore, Albert Einstein College of Medicine, kindly donated 0.3 cc 100 IU insulin syringes, for use by toddlers with diabetes. These very young children often need insulin in  $\frac{1}{2}$  unit increments, which cannot be given with the conventional 1cc syringes available in India. Thank you, Dr Mazumdar, for the very kind gesture!

### **APPES NEWS**

*Vijayalakshmi Bhatia & Nalini Shah*

APPES (Asia Pacific Pediatric Endocrine Society) is preparing for 2 events being organized in Hanoi, Vietnam, in the near future. The mid-term Fellows' Meeting (9-12 November) is back to back with a CME in Pediatric Endocrinology (12-13 November). Interested members of ISPAE have sent in their applications, and the short list is in the process of being prepared. APPES likes to offer these Fellows' Meeting slots to applicants from member countries, who have a demonstrated permanent interest in pediatric endocrinology, who have already had some amount of training in pediatric endocrinology, and are relatively junior in their career. They must already be (or become) a member of the member Country Pediatric Endocrinology Society. The representatives to APPES from the member country (we currently represent India, as appointed by the ISPAE executive) as well as ISPAE office bearers, assist APPES in the above processes.

The Scientific Program Committee of APPES is also starting to make the program for the 7<sup>th</sup> Biennial Scientific Meeting, which will be from 14 - 17 November 2012 in Nusa Dua,

Bali, Indonesia. See the APPES website, or the meeting website, which is now live - [www.appes2012.com](http://www.appes2012.com). You can 'register your interest' on the registration page of the website to ensure you are emailed the registration brochure once available. Dr Paul Hoffman (New Zealand) has been the Chairperson of the Scientific Program Committee for some years now; other members are Dr Reiko Horikawa, Dr V Bhatia, Dr Xiaoping, Dr Bambang and Dr Pik To Cheung. Issues are discussed by teleconference.

The APPES Executive Council also meets by teleconference once in about 4 months. Both of us invariably attend these teleconferences and put forward issues relevant to ISPAE and India. Initiatives currently being undertaken include formulating Consensus Statements on 'Vitamin D and nutritional rickets' and 'Congenital Hypothyroidism'; and participating in the International Global Inequalities efforts (Dr Reiko Horikawa is the Chair of the APPES sub-committee).

The next international conference of Pediatric Endocrinology, to be held in Rome in 2013, will have a slot for an APPES speaker. The search is on at the moment, for a list of people from the region with a strong body of published work, to short list from. APPES now has a "new look" website; and a Facebook page which will be updated with information on the association as well as upcoming meetings – do visit them. It also offers several educational opportunities which are of consistently high quality. These include the Fellows' Meeting - which offers 4-5 slots to Fellows from India, and often Indian faculty as teachers; support for an APPES speaker for our own ISPAE-PET meetings (this year it is Reiko Horikawa); an interactive case based discussion group in their website; to name a few. A strong organization to represent the interests of pediatric endocrinologists in the Asia Pacific region is important. All ISPAE members should consider becoming members of APPES. They can visit the website, and in case of difficulty, contact Lyndell Wills, the manager of the APPES secretariat.

## *"Win or Lose? The Choice is Yours"*

### **Psychological Aspects of Diabetes Care during Adolescence**

*Contd from page 1*

... and look for a social position among their peers. It is a stage of life where they show eagerness for peer interactions. They look at themselves through the eyes of those around them, mostly their peers. All their actions, eating, dressing, talking, are done so as to be 'different' and to have the approval of those they consider important. There is little to stop the young ones from testing their abilities and establishing their independence, whether in their actions or in their decision making abilities.

They often face issues of identity crisis, low self-confidence, and not having enough freedom. Given a situation, most challenge adult authority and select their 'role-models'. As can be expected, there is over-reaction to any situation where they have to face failure, rejection or ridicule.

It is important to understand these emotions of the adolescents. Most parents have to 'let go' and accept that the child is growing up. They must remind themselves that alongside the adolescents' strong need for peer approval, and recognition of their achievements, they do seek the approval of elders in what they do.

If this is what adolescents are, their suffering from diabetes pushes them into a situation where their sense of being in control of their life-situation itself gets challenged. The turmoil is so much that it would affect many adults, what to say of the adolescents! The challenges are many. From the stage of diagnosis to the stage of integration of diabetes in one's lifestyle, is a long journey that needs to be undertaken in a short time. It is not easy to accept that it is a condition with which one has to live forever. Even if diagnosis has occurred during childhood, it may during adolescence that this realization comes. This acceptance comes, be it sooner or later, and it is so difficult, that much supportive hand-holding may be needed. Of course, each young person is unique, and so are his/her experiences with diabetes. Consequently the psychological impact of the illness differs according to the level of understanding of the ailment and inherent personality differences.

Let us have a look at the different emotions that adolescents with diabetes experience in the context of their illness. For most of them, as also for their parents, it is initially shock, followed by anger, anxiety, fear, insecurity, frustration, self-pity, guilt, loneliness, and sadness. Most often, they question themselves, 'Why me?' The situation is one in which the answers are not easy to find.

There is little space in the lives of adolescents to adjust to a kind of 'regime' that diabetes demands. How does it change their lives? Talk to them and they would share that almost every aspect of their life needs adjustment, and learning how to cope. As one young man succinctly put it, "I am 16 years old, but my age does not matter... The graph of maturity versus age

ceases to be linear when you are a diabetic. It makes you mature."

The main psychological concerns that emerge are:

(a) **Need to compromise:** Most young persons with diabetes know that they can take part in almost every activity or even eat almost anything. But the compromise comes on when and how much. Each event is a challenge and compromise in life becomes an inevitable reality.

(b) **Loss of freedom:** Many young persons with diabetes have to wait a while longer than their peers before they can independently do the things they want to. Sometimes, their health does not let them, so they end up feeling lonely because they are 'different'. They feel sad at missing out on even on simple things their peers take for granted, such as sleeping in late on a weekend.

(c) **Feeling of anxiety:** Many adolescents experience fear and anxiety about many aspects of their lives - hypoglycemic episodes, regular monitoring and medical consultations, health complications, and the future. These have been looked at by Power (2002) and she has emphasized the need for supportive interventions for the individual and the family.

(d) **Effect on inter-personal relationships:** A young person with diabetes does have awareness of the impact this illness has on family routines and on the roles and responsibilities of either of the parents. Many share having difficult relationship with siblings.

(e) **Taking on added responsibility:** Timely eating, blood glucose testing, injecting, all need to have a pattern. Many young people with diabetes shun this responsibility, increasing conflict with parents.

(f) **Feeling of guilt:** As the young person with diabetes grows and understands this illness, he/ she may sometimes feel guilty about different things such as over-indulging in eating, or even feeling responsible for others in the family needing to make a compromise or spend so much on their behalf.

These are only a few of the issues of adolescents with diabetes; there are many others that families have to face and struggle to find solutions. It is therefore important to look at some approaches that can help in addressing these concerns.

**Coping Mechanisms:** Grey and others (1998) have emphasized evidence to show the link between positive psychological adjustment and well-being, and effective management of diabetes Given that diabetes is a life-

long condition, it calls upon a continuous need to develop appropriate coping mechanisms that are suitable to a particular age group and a particular stage of diabetes care. Building in psychological support systems into routine diabetes care and management has immense benefits. This is even more relevant in the Indian context where diabetes care is not always possible with a medical team approach. The following are thus some suggestions that can be integrated within the plan made between a doctor and a family, of diabetes management of an adolescent:

a. **Supportive adults:** All adolescents, even when rebelling, do look for support and opinion of elders in deciding on their plans. The youngster with diabetes probably needs such support more than others. He/she may suffer more anxiety than others regarding the ability to do something new. As a parent or family member of a teenager who has to cope with multiple challenges in life, being available to listen, discuss and support these changes is important. "Befriend" is the best approach. Chase (2006) emphasizes that the presence of a readily available supportive adult, who is not overbearing or constantly nagging, can be of great help to any person with diabetes.

b. **Dialogue is important:** The youngsters with diabetes need to be respected and trusted. Successful management of the illness requires an open platform of sharing both the pitfalls and the achievements. There is a need to create a space where feelings can be expressed and discussed. A golden rule is never to condemn, never to go in to the past, but to work towards the future. Coping mechanisms need to be periodically revised. In doing so, empathy works well. Place yourself in the shoes of the teenager, and then respond.

c. **Building the environment:** Management and care of diabetes needs an environment without too much stress, for successful outcomes. Coping with stress is difficult for both parents and the child. Counseling and guidance from professionals wherever needed should be accessed.

d. **Mentoring:** A lesson learnt by many parents over years of managing diabetes is to never 'grope in the dark'. Diabetes care draws a lot from the experiences of others. Therefore one can link to other 'diabetic mentoring families'. A lot of useful inputs can come from them. Parents can learn from other mentoring families, as can the child with diabetes have another child who is coping well, be a mentor. In turn the family can provide mentoring to other families. This



kind of sharing is very meaningful in the process of working and negotiating changes in one's lifestyle.

**e. Role Clarity:** Parents should have clarity on their roles at every stage of care of their child with diabetes. At all stages, regardless of the level of responsibility of self-care their child has assumed, the parents have to be engaged in the treatment plan. At no stage can the adolescent be left entirely on his/her own. Also parents have the complete responsibility to make the school teachers aware of the child's special needs and ensure the supply of glucometer, (unexpired) strips and glucose not only at home, but also at school. Issues of school absenteeism and management of school functions and sports activities need to be worked out between the parents and concerned teachers.

**f. Off-loading:** Diabetes care also means families must be accommodating to the specific needs of the teenager with diabetes. A flexible approach and prior planning of various events can reduce anxiety and off-load a lot of burden.

**g. Disclosure issues:** Adolescents go through a lot of stress in deciding whom to share information about their diabetes with. Would their friends accept them the same way once they know about it? Talking about the expected outcomes of disclosure is helpful. Parents and care-givers must realize that this child has a greater need to think through problems and then arrive at solutions. He/she should never be left alone to do so. It goes without saying that when a child grows up with a secure feeling of such support, he/she learns to manage the ailment better.

**h. Sibling roles:** Parents have a role in helping siblings to play a supportive role for the adolescent with diabetes as they grow up. In several families, the sibling plays a significant role in the exercise and activity plan of the adolescent with diabetes. Constant engagement helps reduce feelings of resentment.

**i. Spiritual coping:** It is well accepted that spirituality has a role to play in coping with illness. Here too, with parental guidance, spirituality can help youngsters develop a positive approach towards life and face the challenges that diabetes brings forth. In this way the parents can prepare them for the challenges they would face in future.

**j. Prohibitions:** Hanas (2007) emphasizes the importance of understanding the difference between 'Diabetes Rules and Family Rules'. He has elaborated that many rules are part of normal upbringing. Parents should not attribute all prohibitions to diabetes. It is important to explain to the child and siblings, otherwise all prohibitions may be wrongly associate with diabetes.

**k. Appreciation:** Positive reinforcement of the adolescent's diabetes management is of utmost importance in sustaining every small change. Testing, exercising, and good eating habits all need to be appreciated.

In conclusion, it is the attitude of the family towards each other and towards diabetes that determines successful outcomes, not only for diabetes, but also for the family as a whole. To sum up, '**'Don't Deny, Don't fight. Face it Head On!'**

(Jyoti Kakkar is also the mother of a Type 1 adolescent with diabetes.)

#### References

- Chase PH (2006): Understanding Diabetes: A Handbook for People who are living with diabetes. 11<sup>th</sup> edition. Children's Diabetes Foundation, Denver. USA.
- Hanas R (2007): Type 1 Diabetes. A Guide for Children, Adolescents, Young Adults, and their caregivers. Marlowe and Company, New York.
- Grey M, Boland A, Davidson M, Yu C, Sullivan-Bolyai S, Tamborlane WV (1998): Short term effects of coping skills training as adjunct to intensive diabetes therapy in adolescents. *Diabetes Care*, 1998; 21: 902-908.
- Power T (2002): Role of Social Workers in Diabetes Care. *Diabetes Voice*. December 2002; Volume 47; Issue no 4.

[Check out the website: in the section for patients, you can find "**Living and Smiling with Diabetes**", which has articles written by youngsters with diabetes. We and our patients can use this platform to share and learn from each other. – Ed.]

#### PEDENDO-SCAN

Leena Priyambada, leenapriyambada@gmail.com

**Evaluation, Treatment, and Prevention of Vitamin D Deficiency: an Endocrine Society Clinical Practice Guideline.** (*J Clin Endocrinol Metab* 96: 1911–1930, 2011) MF Holick, NC Binkley, HA Bischoff-Ferrari, CM Gordon, DA Hanley, RP Heaney, MH Murad & CM Weaver.

The Task Force used the best available research evidence to develop the recommendations and has provided guidelines to clinicians for the evaluation, treatment, and prevention of vitamin D deficiency (VDD).

This article also describes vitamin D photobiology, metabolism, physiology, and biological functions; peeps into the prevalence, causes and consequences of vitamin D deficiency and the sources of vitamin D.

The recommendations and suggestions catering to children are briefly outlined here and readers are urged to refer to the main article for further reading.

#### Diagnostic procedures:

- \*\* Recommends screening for VDD in individuals at risk for deficiency (and not population screening). A list of conditions has been provided.
- \*\* Recommends using serum circulating 25(OH)D level, measured by a reliable assay, to evaluate vitamin D status.
- \*\* Defines deficiency as 25(OH)D level below 20 ng/ml, and insufficiency as 25(OH)D level of 21–29 ng/ml.

#### Recommended dietary intakes of vitamin D for patients at risk for VDD:

- \*\* For patients at risk for VDD: Suggests that infants (0–1 yr) require at least 400IU/d of vitamin D; and children 1 yr and older require at least 600 IU/d to maximize bone health. Emphasizes that whether 400 and 600 IU/d for children aged 0–1 yr and 1–18 yr, respectively, are enough to provide all the potential non-skeletal health benefits associated with vitamin D to maximize bone health and muscle function is not known at this time.
- \*\* Advises that to raise blood level of 25(OH)D consistently above 30 ng/ml (75 nmol/liter) may require at least 1000 IU/day of vitamin D.
- \*\* Suggests that obese children, children on anticonvulsant medications, glucocorticoids, antifungals such as ketoconazole, and medications for AIDS be given at least 2–3 times more vitamin D to satisfy their body's vitamin D requirement.
- \*\* Suggests that the maintenance tolerable upper limits (UL) of vitamin D should be 1000 IU/day for infants up to 6months, 1500 IU/day for infants from 6 months to 1 yr, at least 2500IU/day for children aged 1–3yr, 3000IU/day for children aged 4–8yr, and 4000IU/d for everyone over 8yr. However, higher levels (2000 IU/d for children 0–1 yr, 4000 IU/d for children 1–18yr, and 10,000IU/d for children and adults 19yr and older) may be needed to correct VDD.

#### Treatment/ prevention strategies for patients with VDD:

- \*\* Suggests either vitamin D<sub>2</sub> or vitamin D<sub>3</sub> for the treatment and prevention of VDD.
- \*\* Infants and toddlers aged 0–1 yr: treatment with 2000 IU daily of vitamin D<sub>2</sub> or D<sub>3</sub>, or with 50,000 IU of vitamin D<sub>2</sub> or D<sub>3</sub> once weekly for 6 wk to achieve a blood level of 25(OH)D above 30 ng/ml, followed by maintenance therapy of 400–1000 IU/day.
- \*\* For children aged 1–18 yr: suggest treatment for at least 6 wk, with 2000 IU of vitamin D<sub>2</sub> or D<sub>3</sub> daily, or 50,000 IU of vitamin D<sub>2</sub> once a week, to achieve a blood level of 25(OH)D above 30 ng/ml, followed by maintenance therapy of 600–1000 IU/d.

#### Non-calcemic benefits of vitamin D:

- \*\* It does not recommend vitamin D supplementation beyond recommended daily needs for the purpose of

preventing cardiovascular disease or death or improving quality of life.

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**Final Adult Height in Children with Congenital Adrenal Hyperplasia Treated with Growth Hormone.** (*J Clin Endocrinol Metab* 96: 1710–1717, 2011). K Lin-Su, MD Harbison, O Lekarev, MG Vogiatzi & MI New.

34 patients with 21-OHD CAH with poor predicted adult height were treated with recombinant human GH at an initial dose of 0.3 mg/kg per week, increased up to a maximum dose of 0.45 mg/kg per week to maintain growth velocity at the 50th or higher percentile for bone age without exceeding the normal range of IGF-I. GH treatment was continued until final adult height was reached. Subjects with either precocious or early central puberty were also treated with LHRHa. Mean age at the start of GH therapy was  $8.8 \pm 2.5$  yr in males and  $8.4 \pm 1.9$  yr in females. The mean duration of GH treatment was  $5.6 \pm 1.8$  yr in males and  $4.5 \pm 1.6$  yr in females. The mean duration of LHRHa therapy was  $3.7 \pm 1.7$  yr. The final adult height was significantly higher than baseline predicted height in both males ( $172.0 \pm 4.8$  vs.  $162.8 \pm 7.7$  cm,  $P < 0.000001$ ) and females ( $162.2 \pm 5.3$  vs.  $151.7 \pm 5.2$  cm,  $P < 0.0000001$ ). Mean gain in height was  $9.2 \pm 6.7$  cm in males and  $10.5 \pm 3.7$  cm in females. The authors have concluded that GH alone or in combination with LHRHa is an effective therapy for improving final adult height in CAH.

*[What has always puzzled me is how these unfortunate children, already tall, cope psychologically with being even taller than their peers and achieving their FAH at a young age! – Ed]*

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**The Best Practice & Research Clinical Endocrinology & Metabolism, Volume 25, Issue 3, (June 2011)** is devoted to ‘**Endocrine Disease in HIV Infection**’. This issue deals extensively with the effect of HIV infection on endocrine organs, lipid abnormalities, adipose tissue biology, insulin resistance, metabolic syndrome, type 2 diabetes mellitus, growth hormone deficiency, bone abnormalities, and hypogonadism associated with HIV infection.

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#### MEMBERS' PUBLICATIONS

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

“Paradoxical euthyroid hormone profile in a case of Graves' disease with cardiac failure. G Jevalikar, P Gupta, V Bhatia, A Kapoor, S Gambhir, *Internat J Pediatric Endocr 2011, 2011:8.*”

Cardiac failure in sinus rhythm is an unusual complication of Graves' disease. It can sometimes be associated with sick euthyroid syndrome, due to which the laboratory tests may not reflect the severity of the

hyperthyroidism. This case report recently published in the International Journal of Pediatric Endocrinology highlights this and several other unusual features of Graves' disease.

### MORE ISPAE NEWS

#### **DELHI IAP MEETING ON PEDS ENDO**

Anju Virmani, [virmani.anju@gmail.com](mailto:virmani.anju@gmail.com)

IAP Delhi is celebrating its 50<sup>th</sup> year. As part of the Golden Jubilee celebrations, President Dr AS Vasudev, and General Secretary, Dr Anil Bajaj, initiated a series of monthly Clinical Meetings, dealing with one super-specialty at a time. For the first meeting, the honor went to Pediatric Endocrinology. It was held on 21st April 2011 at Maulana Azad Medical College. The local team, headed by Dr Sangita Yadav, presented 2 cases, which were discussed by the panel of experts, viz. Drs Archana Arya, Anju Seth, Anju Virmani, and IPS Kochar. The meeting was very well attended, with a lot of audience participation, and was much appreciated.



#### **GROWTH ASSESSMENT & AWARENESS CAMP**

Anurag Bajpai, [dr\\_anuragbajpai@yahoo.com](mailto:dr_anuragbajpai@yahoo.com)

A growth assessment and awareness camp was organized at Regency Hospital Limited, Kanpur, on 4<sup>th</sup> June 2011 under the auspices of Indian Society of Pediatric & Adolescent Endocrinology, IAP Kanpur, and Department of Endocrinology, Regency Hospital, Kanpur. The camp provided free consultation with Dr Anurag Bajpai and awareness to 148 children with growth failure. The camp unmasked the diagnosis in a number of children (growth hormone deficiency in 8, Celiac disease in 6, Turner syndrome and Distal RTA in 2 each).



#### **CELIAC SOCIETY OF KANPUR**

Anurag Bajpai, [dr\\_anuragbajpai@yahoo.com](mailto:dr_anuragbajpai@yahoo.com)

The Celiac Society of Kanpur was set up on 12 June 2011, with an aim of spreading awareness of the condition and providing much needed support for children affected by the condition. The

inaugural meeting at Jalsa Banquet Hall, Kanpur, was attended by 45 children with celiac disease (CD) from Kanpur and nearby region. Dr Anurag Bajpai, General Secretary of the Society, mentioned that it would strive to increase access to diagnostic facilities for CD and gluten free diet. During the inaugural event, an educational booklet on CD was released to guide parents about day to day management.



#### **KSCB DIABETES MEETING**

Bhanukiran Bhakhri, [drbhanu04@yahoo.co.in](mailto:drbhanu04@yahoo.co.in)

The Dept of Pediatrics, Kalawati Saran Children Hospital, New Delhi, organized a Diabetes Meet on 1<sup>st</sup> July 2011. It was primarily an interactive program, focusing on educating and updating parents and patients of type 1 diabetes, about handling day to day problems. More than 40 attendees were benefited by the sessions taken by Dr Anju Seth, Ms Anuja Aggarwala, Dr Rajni Sharma and Dr Bhanukiran Bhakhri. YPSOMED helped in the organizational arrangements of the meeting. The content of sessions:

- \*\* What is diabetes & how is childhood diabetes different from adult diabetes
- \*\* Blood sugar testing demonstration
- \*\* Insulin therapy (types, regimes, injection technique, site, storage)
- \*\* Diet in diabetes
- \*\* Monitoring (Home/ clinic, SMBG timing, record keeping, urine test, long term complications)
- \*\* Glucometers
- \*\* Sick day and hypoglycemia

#### **FORTHCOMING MEETINGS**

1. **EASD 2011:** 47th Annual meeting: Lisbon, Portugal: 12-16 September, 2011.
2. **ESPE 2011:** 50th ESPE Meeting: Glasgow, Scotland: 25-28 Sep, 2011. Theme: 'Evidence-based Pediatric Endocrinology – its strengths and limitations'. <http://www.eurospe.org/meetings/>; [www.eurospe.org](http://www.eurospe.org)
3. **ISPAD 2011:** 37<sup>th</sup> Annual Meeting: Miami, USA: 19-22 October 2011. Contact Dr Alan Delamater, [ADelamater@med.miami.edu](mailto:ADelamater@med.miami.edu)
4. **RSSDI 2011:** 39th Annual Conference of RSSDI: 4-6 November 2011, Mumbai. [www.rssdi2011.org](http://www.rssdi2011.org)
5. **APPES Fellows Meeting:** Hanoi, Vietnam: 9–12 November 2011. See website: [www.appes.org](http://www.appes.org)
6. **APPES CME Meeting:** Hanoi, Vietnam: 12-13 November 2011.

August 2011

7. **PET 2011:** Pediatric Endocrine Training Program: Calicut, Kerala: 22-25 November 2011. Contact: M Vijayakumar, drmvijaycalicut@gmail.com
8. **ISPAE 2011:** 2<sup>nd</sup> Biennial Meeting: Calicut, Kerala: 25-27 Nov 2011. Contact: M Vijayakumar, drmvijaycalicut@gmail.com
9. **ESICON 2011:** Annual Meeting of the Endocrine Society of India: Pune: 1-3 Dec 2011. Contact Col Narendra Kotwal, narendrakotwal@gmail.com or esicon2011@gmail.com. Website: esicon2011.com.
10. **World Diabetes Congress:** 4-8 December 2011, Dubai, UAE. Email: [YouthLeadersDubai2011@idf.org](mailto>YouthLeadersDubai2011@idf.org)

### **PEDIATRIC ENDOCRINE WORKSHOP: PRE-PEDICON 2012**

Ganesh Jevlikar, [g\\_jewlikar@yahoo.co.in](mailto:g_jewlikar@yahoo.co.in)

The full day Preconference Pediatric Endocrinology Workshop will be held on **18<sup>th</sup> January 2012** (8am – 5pm) at **ESIC Model Hospital, Sector 9A, Gurgaon**. The organizing team consists of Dr Anju Virmani (Chair), Dr Ganesh Jevlikar (Consultant Endocrinologist, Medanta Medicity, Gurgaon) and Dr Sapna Mittal (HOD, ESI Hospital, Gurgaon) (Organizing Secretaries). The scientific program focuses on practical skills important for pediatric practitioners and postgraduate students. It will be conducted by 10 eminent faculty members from across India. Not more than 35-40 delegates can be registered (on a first-come-first-served basis), so please register early!

The registration form can be downloaded from [www.pedicon2012.org](http://www.pedicon2012.org): the website of PEDICON 2012. Completed registration forms are to be posted to Dr Mahaveer Jain. (The details of mode of payment and address for correspondence in mentioned in the form.)

### **PEDICON 2012**

PEDICON 2012, the 49<sup>th</sup> Annual Meeting of IAP, will be conducted from 18-22<sup>nd</sup> January 2012 at Leisure Valley ground in the Millennium city of Gurgaon. Expect the popular Chapter Symposium, and other endocrine coverage in panel discussions and CMEs.

13. **5<sup>th</sup> International Conference on Advanced Technologies & Treatment for Diabetes:** Barcelona, Spain: 8-11 February 2012.
14. **59<sup>th</sup> Annual ADA Advanced Postgraduate Course:** San Francisco, USA: 17-19 February 2012.
15. **International Conference on Nutrition & Growth:** Paris, France: 1-3 March 2012.

16. **LWPES 2012:** Annual Meeting of the Lawson Wilkes Pediatric Endocrine Society (USA): Boston, Mass. 28 April-1 May, 2012.
17. **ENDO 2012:** Annual Meeting of the Endocrine Society: Houston, Texas, USA. 23-26 June, 2012.
18. **ESPE 2012:** 51<sup>st</sup> ESPE Meeting: Leipzig, Germany: 20-23 September, 2012. Email: [espe@eurospe.org](mailto:espe@eurospe.org)
19. **ISPAD 2012:** 38<sup>th</sup> Annual Meeting: Istanbul, Turkey: 10-13 October 2012.
20. **APPES 2012:** 7<sup>TH</sup> Biennial Scientific Meeting: Nusa Dua, Bali, Indonesia: 14 - 17 Nov 2012. email: [appes@willorganise.com.au](mailto:appes@willorganise.com.au). Website: [www.appes2012.com](http://www.appes2012.com). Or go to the APPES Facebook page, for updated information on the association as well as upcoming meetings.
21. **LWPES 2013:** Annual Meeting of the Lawson Wilkes Pediatric Endocrine Society (USA): Washington DC. 4-7 May, 2013.
22. **ENDO 2013:** Annual Meeting of the Endocrine Society: San Francisco, USA. 15-18 June, 2013.
23. **ESPE-LWPES:** 9<sup>th</sup> Joint ESPE/ LWPES Meeting: Milan, Italy: 19-22 September, 2013. Email: [espe@eurospe.org](mailto:espe@eurospe.org)
24. **ISPAD 2013:** 39<sup>th</sup> Annual Meeting: Gothenburg, Sweden: October 2013.
25. **LWPES 2014:** Annual Meeting of the LWPES: Vancouver, Canada. 3-6 May, 2014.
26. **ENDO 2014:** Annual Meeting of the Endocrine Society: Chicago, USA. 21-24 June, 2014.
27. **ESPE 2014:** 53<sup>rd</sup> ESPE Meeting: Dublin, Ireland: 18-21 September, 2014. Email: [espe@eurospe.org](mailto:espe@eurospe.org)
28. **ISPAD 2014:** 40<sup>th</sup> Annual Meeting: Canada.
29. **LWPES 2015:** Annual Meeting of the LWPES: San Diego, CA. 25-28 April, 2015.
30. **ENDO 2015:** Annual Meeting of the Endocrine Society: San Diego, CA. 20-23 June, 2015.
31. **ESPE 2015:** 54<sup>th</sup> ESPE Meeting: Barcelona, Spain: 9-12 September, 2015. Email: [espe@eurospe.org](mailto:espe@eurospe.org)
32. **ISPAD 2015:** 41<sup>st</sup> Annual Meeting: Australia.
33. **LWPES 2016:** Annual Meeting of the LWPES: Baltimore, Maryland. 30 April- 3 May, 2016.
34. **ENDO 2016:** Annual Meeting, Endocrine Society: Boston, MA. 4-7 June, 2016.
35. **LWPES 2017:** Annual Meeting of the LWPES: San Francisco, CA. 6-9 May, 2017.
36. **LWPES 2018:** Annual Meeting of the LWPES: Toronto, Canada. 5-8 May, 2018.
37. **LWPES 2019:** Annual Meeting of the LWPES: Baltimore, Maryland. 27-30 April, 2019.
38. **LWPES 2020:** Annual Meeting of the LWPES: Philadelphia, PA. 2-5 May, 2020.

### **NOTES & NEWS**

Dear Sir/Madam,

As you may be aware, the Madras Diabetes Research Foundation (MDRF), Chennai, has been in the forefront of research on diabetes in this country, with special interest in the genomics of diabetes. Our

research centre's website [www.mdrf.in](http://www.mdrf.in) will give you an idea about the type of research that we are doing. Our hospital website [www.drmohansdiabetes.com](http://www.drmohansdiabetes.com) will give you an idea about the type of clinical services that are offered at our centre.

As an ICMR Advanced Centre for Genomics of Diabetes, we at MDRF have been working on the genetics of Neonatal Diabetes. We have so far screened about 30 children with neonatal diabetes and have found some novel mutations both the KIR gene as well as the SUR gene. We also have facilities to screen for the insulin gene. Thus, to our knowledge, this is the first comprehensive screening for Neonatal Diabetes genes in our country. I would like to ask you whether you have any cases with Neonatal Diabetes in your practice. If so, we would be happy to offer to do genetic screening for Neonatal Diabetes mutations. This is being offered as a service and therefore will be done completely **free of cost**. We would require a blood sample of the child along with some clinical details. The child can be anonymized with respect to name and other identifiers to maintain confidentiality. If you are interested, kindly contact any one of us at the numbers given below:

\*\* Dr Radha Venkatesan: 098401 06815, (044) 47405909, [drradha@mdrf.in](mailto:drradha@mdrf.in) / [radharv@yahoo.co.in](mailto:radharv@yahoo.co.in)

\*\* Dr V. Mohan's Secretary: (044) 2835 3580, [drmohans@diabetes.ind.in](mailto:drmohans@diabetes.ind.in)

\*\* Ms. Amutha Anandakumar: 99403 73069, [amuthanandh@gmail.com](mailto:amuthanandh@gmail.com)

With regards, Dr V MOHAN

Chairman & Chief Diabetologist, Dr. Mohan's Diabetes Specialties Centre, 6B, Conran Smith Road, Gopalapuram, Chennai 600086. 044-43968888. [drmohans@diabetes.ind.in](mailto:drmohans@diabetes.ind.in), [www.mdrf.in](http://www.mdrf.in), [www.drmohansdiabetes.com](http://www.drmohansdiabetes.com), Fax: 044-28350935.

**Erratum:** The article on Rickets referred to the writings of Francis Glisson. These were in 1650, not 1950.  
Thank you, **Dr Prasanna Kumar**, for pointing it out!-Ed

### CASE VIGNETTE

Ganesh Jevalikar, [g\\_jewlikar@yahoo.co.in](mailto:g_jewlikar@yahoo.co.in)  
(Please send answers to this email id)

Mr A, 17 yr male was diagnosed to have Graves' disease based on clinical symptoms and thyroid scan, for which he had undergone radioiodine ablation 8y back. He also was suffering from rheumatoid arthritis and was on methotrexate, folic acid and prednisolone. When he developed radiation induced hypothyroidism, he was treated with 150 mcg of thyroxin. The treating doctor found that his TSH was 8.4 mIU/L and total T4 was 15 mcg/dl. The dose of the thyroxin was increased to 200 mcg. In the subsequent follow up, he complained that he was feeling better with the

previous dose and now he has nervousness, decreased appetite and increased daytime somnolence. on clinical examination he had a pulse of 104/min, blood pressure 120/70 mmHg, and tremors. His thyroid function revealed a further rise in TSH to 11.4 mIU/L and T4 was 17 mcg/dL.

#### Questions:

1. What is the differential diagnosis of this thyroid profile?
2. What should be the further course of action?

Please send your replies to: [g\\_jewlikar@yahoo.co.in](mailto:g_jewlikar@yahoo.co.in)

### ANSWERS TO THE QUIZ IN CAPE NEWS APRIL 2011

1. *Which of the following HLA types is highly protective of Type 1 Diabetes?* a. **HLA-DQB1\*0602.** This allele provides dominant (but not absolute) protection against T1DM even in the presence of autoantibodies and other high risk HLA types. It is seen in < 1 % of T1DM.

2. *Which of the following is not a good choice of treatment of hypoglycemia?* d. **Ice-cream.** Because of the fat content in ice cream, the rise of blood glucose after eating it will be slow. 'Diet' cold drinks are also a poor choice in hypoglycemia, but normal cold drinks can give immediate rise of blood glucose.

3. *Which of the following is not true in case of T2DM in children?* c. **Ketoacidosis is not an initial presentation.** Although ketoacidosis (DKA) is more common in T1DM, it can be an initial presenting feature in 5-25 % of new cases of T2DM. **Message:** T2DM is an important differential for obese adolescents with diabetes.

4. *A 10 kg child was admitted with DKA and 5 % dehydration. His fluid correction was planned over 48 hrs. He had received 300 ml of normal saline as boluses in outside hospital. His fluid requirement over next 48 hr will be b. 2.2 L.*

Deficit = 50 ml/ kg (5% dehydration) = 50 X 10 = 500 ml  
Maintenance for 48h = 2000 ml (by Holliday-Segar method)

Fluids already given = 300 ml

Fluid requirement = (Deficit + Maintenance)- fluids given  
= (500+ 2000)- 300  
= 2200 ml.

**Message:** In cases of DKA it is very important to ask how much fluid was given prior to the hospitalization (including the fluids given at home).

5. *One carbohydrate (carb) exchange equals how many grams of carbohydrate?* b. **15 gm.** One carb exchange = 15gm of carbs. Exchanges can be used in place of actual grams to calculate the insulin requirement for dietary carbohydrates.