CAPE NEWS

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Carbohydrate Counting in Diabetes Management

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Diet forms the cornerstone of diabetes management, especially if the diabetes is managed with help of insulin. Insulin therapy calls for strict diet regimens, to prevent hypoglycemia and sometimes marked hyperglycemia. Unfortunately, strict dietary protocols mean lowest compliance among patients. Hence the "carbohydrate counting" approach to dietary management of diabetes, which gives flexibility, is important. It has been seen that patients are better able to manage sugars when they are given liberal choices to help them select foods, whether eating at home or outside. Carbohydrate counting is of course a must for patients with insulin pumps to adjust bolus doses.

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SECRETARY'S MESSAGE

Dear Esteemed Members,

Warm Greetings for the year 2013! It gives me great pleasure to communicate with you all.

To avoid any glitches related to communications with our ISPAE members, we had first of all requested regarding updation of your addresses. Some of you responded and we have incorporated the changes in the records. We have also been encouraging new memberships, and in this year, we welcome 10 new members into the ISPAE family.

… Contd on page 2

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

ISPAE 2013 & ISPAE-PET 2013 (Pediatric Endocrine Training): Bengaluru.
ISPAE Main Meeting: 29 November – 2 December 2013. Organizing Secretary: Dr Shaila Bhattacharyya, email: shailashamanur@gmail.com
ISPAE-PET: 26-29 November 2013. PET Coordinator: Dr Preeti Dabadghao

PEDICON 2014: 51st Annual IAP Conference: Indore: 8-12 January 2014. Organizing Secy: Dr VP Goswami drvpgoswami@gmail.com, pedicon2014indore@gmail.com

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SECRETARY'S MESSAGE

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Dr P Raghupathy, Dr Vaman Khadilkar, Dr Shaila Bhattacharya, and the entire team of ISPAE 2013 (Biennial meet) are working towards organizing a wonderful academic feast of high scientific caliber once again for all of you. We hope to see you all at Bengaluru: as you know the dates are 30th Nov- 2nd December 2013. Dr Preeti Dabadghao, as Pediatric Endocrine Training (PET) Coordinator, is working on the PET Program, in which many young enterprising doctors with special interest in Pediatric Endocrinology have evinced interest. The committee is making tremendous efforts to make this meeting a great success. Please don't forget to register and make travel arrangements.

Some of you must be contributing towards creating sensitization and awareness related to pediatric endocrine morbidities and their management in the larger public interest. If you have been organizing these events in the community, we would like you to share these events by sending reports and pictures to ISPAE for circulation and motivating others towards serving the community also.

We welcome your suggestions, inputs towards the growth of our young society. For more information on all of our activities, please visit the ISPAE website at www.ispae.org.in.

With warm wishes,
Dr Sangeeta Yadav
(Secretary cum Treasurer)

ISPAE NEWS

NEW MEMBERS: A VERY WARM WELCOME!!

1. Dr Manu Agarwal, New Delhi
2. Dr Meghna Chawla, Pune
3. Dr Aashima Dabas, New Delhi
4. Dr Alok Kumar, Gaziabad
5. Dr Hari Mangtani, Nagpur
6. Dr Srinivasan Palaniappan, Chennai
7. Dr Supriya Phanse, Pune
8. Dr Deepika Rustogi, New Delhi
9. Dr Rabi Kumar Satpathy, Behrampur
10. Dr Brish Bhanu Singh, Rohtas

Carbohydrate Counting in DM Management

Shilpa Joshi, RD

Contd. from page 1 …

The principle of carbohydrate counting is "a carb is a carb", i.e. all kinds of carbohydrates cause blood glucose to rise, whether a simple carbohydrate like sugar or jaggery, or a complex one like wheat, jowar etc. Hence all carbohydrates are counted in a similar manner. Also carbohydrates are the nutrients which elicit the highest glucose response, therefore counting carbohydrates is very important. Other nutrients (proteins and fats) show a weak glycemic response and hence are not calculated. The advantage of this method is that it is very patient friendly, as the patient has to count and understand only one nutrient, rather than all three.

This dietary approach works best for basal –bolus therapy (glargine/ detemir as basal and a short- or rapid-acting insulin as bolus). It is very difficult to use with premixed insulin regimens, as we cannot change the dose of the short acting fraction alone.

SMBG and keeping records of the sugars and the diet are very important for carbohydrate counting. Thus the patient can understand patterns and also decide/ understand what is going wrong with the blood sugar management. The more the sugar readings we have, the better the patterns are understood, and the better the patients can decide what food choices they can opt for. This is particularly necessary for us as most food available in India, whether in restaurants, food courts, or small eating joints, is not labeled, so it is difficult to calculate the carbohydrate content of any item. Therefore when patients consume these items, one has to rely on these patterns to decide the dose of insulin.

In the method of carb counting, carbs in foods are measured in grams; each food item containing 15 gm carbs is called one carb exchange. With this principle in mind, all foods are converted in to carb exchanges (in raw and cooked form) and exchange lists are prepared to give to patients.

Bolus dose adjustment:

Calculate the patient's total daily dose of insulin (TDD), which includes both basal and bolus doses, e.g. if A is taking 20u basal insulin, and 10-10-10u bolus insulin with all 3 meals, then his TDD is 50u.

Now divide 500 by the TDD i.e. 500/TDD= 500/50=10. This is called the "insulin to carb ratio", i.e. for every 10g of carbohydrate consumed, 1 unit of bolus insulin is required. With this data, the patient can plan/ alter his/her diet and adjust the insulin dose as per food intake.

So if for breakfast, A takes Onion poha (2 measures) = 40 g carb; Milk 200 ml = 10g carb; Apple = 10g carb, then total carb = 60g. His Insulin to carb ratio = 1:10, therefore bolus needed is 60/10 = 6 u insulin. So with this meal, A needs a bolus of 6 u rather than 10 u insulin. This dose will prevent A from eating too much just to prevent low sugars later. Also, if he chooses to eat more than this, can increase the insulin dose by adding the amount of carbs increased. This also helps patient to choose what he would like to eat, be it jam, bread, egg, chapatti…

Insulin sensitivity factor: This is required for higher or lower than normal blood sugar readings. It guides patients about the amount of insulin needed to adjust these sugars. To calculate the insulin sensitivity factor we use a rule of 1500 (if regular insulin is being used) or rule of 1800 (for those using analogs). The number (i.e. 1500 or 1800) is divided by the TDD. Thus is A is on regular insulin, the factor = 1500/ 50 = 30: thus 1 u insulin will bring down blood sugar by 30 mg/dl. If he uses analog insulin, 1 u will reduce blood sugar by 36 mg/dl.

Advantages: Carb counting has many advantages. It gives the patient a near normal eating pattern, with plenty of food choices, and yet maintain near normal blood sugars and improved HbA1c.

Disadvantages: Weight gain is the biggest challenge, and occurs because of the wide variety of food choices as well as the good glycemic control. Because the carbs can be compensated for by insulin, he/ she may end up eating more calories.

Precautions:

Carb counting gives patients and their families many food options, so it becomes even more important to educate them about healthy eating habits. Over-doing any single nutrient or total calories should be discouraged.

Pedendoscan

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All-Cause and Disease-specific mortality & morbidity in patients with Congenital Hypothyroidism treated since the neonatal period: a national population-based study. Ahlam Azar-Kolakez, Emmanuel Ecosse, Sophie Dos Santos & Juliane Léger. JCEM 2013; 98: 785-793.

Abstract: Little is known about the long-term health of patients treated for CH since the neonatal period. The authors evaluated the causes of mortality and comorbidity in a population-based registry of young adult patients. They studied all-cause and cause-specific mortality and comorbidity in all 1772 eligible patients diagnosed during the first decade after the introduction of neonatal screening in France. Follow-up data on vital status were available, in May 2010, for 99.5% of the patients. Completed questionnaires were obtained from 1202 of the selected patients.

Results: All-cause mortality in CH patients was slightly higher than expected on the basis of year, age, and sex (standardized mortality ratio [SMR] 1.24, 95% CI: 0.81–1.82). SMRs for each category of underlying cause of death showed mortality due to diseases of the central nervous system (SMR 5.22, 95% CI: 1.68–12.17) and congenital malformations (SMR 3.15, 95% CI: 1.86–6.49) to be significantly higher than expected in the CH patients. The risk of developing an associated chronic disease in the 1202 patients who completed the questionnaire was twice that for the reference population (odds ratio 2.0 [1.32–3.03]). Neurologic or mental diseases and congenital malformations were the most frequent (odds ratios 2.54 [1.12–5.86], 4.18 [1.27–13.76], and 4.36 [1.24–15.34], respectively). Overall, mortality and morbidity were not affected by sex, disease severity, cause of CH, or adequacy of treatment.

Conclusion: Prognosis has improved considerably, but a few patients diagnosed during the first 10 years of screening in France displayed comorbidity and mortality

due to various neurodevelopmental disorders and associated malformations. These results reveal a continuing need for improvements in care and studies to provide knowledge about the full spectrum of the disease and the mechanisms underlying these developmental abnormalities.

Maternal and umbilical cord levels of T_4, FT_4, TSH, TPOAb, and TgAb in term infants and neurodevelopmental outcome at 5.5y. FLR Williams, Jennifer Watson, Simon A Ogston, Theo J Visser, Robert Hume & Peter Willatts. JCEM 2013 98: 829-838.

Abstract: Relatively little is known in euthyroid populations about changes in maternal thyroid hormones (TH) during pregnancy, their relationship to cord TH levels, and subsequent infant neurodevelopment. The authors aimed to describe this relationship (maternal & cord TH) and their associations with neurodevelopment at 5.5 years. They followed up women and their children born at or over 37 weeks' gestation, measuring maternal levels of TSH, thyroid peroxidase antibody (TPOAb), thyroglobulin antibody (TgAb), T_4, and FT_4 at 10 and 34 weeks and at delivery, and cord levels of T_4, FT_4, TPOAb, and TgAb. The association of cord TH parameters with McCarthy scale scores adjusted for the major confounders of neurodevelopment.

Results: Of the women, 15% were TPOAb-positive, 12% were TgAb-positive; the proportion of women with mildly elevated TSH levels increased during pregnancy with the maximum (14%) at delivery. Lower perceptual performance and motor scores were found with TgAb-positive women and lower perceptual performance scores with TgAb-positive cord levels; otherwise, unadjusted maternal levels of TPOAb, TgAb, and TSH and unadjusted cord levels of FT_4, TPOAb, and TgAb were not associated with neurodevelopment at 5.5 years. Low cord T_4 levels were associated with significant increments in four McCarthy scales: General Cognitive Index, Verbal, Quantitative, and Memory scales—increments that persisted after adjustment at 11.4, 7.8, 7.6, and 7.8 points, respectively.

Conclusions: Lower levels of cord T_4 were associated with increments in the McCarthy scales in the domains that tested cognitive and verbal abilities at 5.5y.

Congenital Hypothyroidism due to Defects of Thyroid Development and Mild Increase of TSH at Screening: Data From the Italian National Registry of Infants with Congenital Hypothyroidism. Antonella Olivieri, Carlo Corbetta, Giovanna Weber, Maria Cristina Vigone, Cristina Fazzini, Emanuela Medda, and The Italian Study Group for Congenital Hypothyroidism. *JCEM 2012-3273*

Abstract: Over the years lower TSH cutoffs have been adopted in some screening programs for CH, resulting in increased detection of mild forms of the disease, with normally located and shaped thyroid. The question of whether such additional mild CH cases can benefit from detection by newborn screening and early thyroid hormone treatment is still open. The authors aimed to estimate the frequency of cases with mild increase of TSH at screening in the Italian population of babies with permanent CH and to characterize these babies in terms of diagnosis classification and neonatal features. Data recorded in the Italian National Registry of infants with CH were analyzed.

Results: Between 2000-2006, 17 of the 25 Italian screening centers adopted a TSH cutoff at screening of <15.0 μU/mL. It was found that 21.6% of babies with permanent CH had TSH at screening of 15.0 μU/mL or less, whereas this percentage was 54% in infants with transient hypothyroidism. Among the babies with permanent CH and mild increase of TSH at screening (≤15 μU/mL), 19.6% had thyroid dysgenesis with serum TSH levels at confirmation of the diagnosis ranging from 9.9 to 708 μU/mL. These babies would have been missed at screening if the cutoff had been higher.

Conclusions: Lowering TSH cutoff in our country has enabled us to detect additional cases of permanent CH, a number of which had defects of thyroid development and severe hypothyroidism at confirmation of the diagnosis.

Implementation of a Liquid Chromatography Tandem Mass Spectrometry assay for 8 adrenal C-21 steroids and Pediatric Reference Data. Kulle AE, Welzel M, Holterhus P-M, Riepe FG. Horm Res Paediatr 2013;79:22–31.

Abstract: Sensitive and accurate determination of steroids is essential for diagnosing congenital and acquired adrenal diseases. Since plasma concentrations change during childhood, age-specific reference ranges are the prerequisite for clinical interpretation. The objectives of this study were to develop a sensitive and reliable method for simultaneous detection and quantification of progesterone, 17-hydroxyprogesterone, deoxycorticosterone (DOC), 11-deoxycortisol, 21-deoxycortisol, corticosterone, cortisol (F) and cortisone (E) by ultra-performance liquid chromatography tandem mass spectrometry (UPLC-MS/MS) and to establish age- and sex-specific reference ranges from birth to adulthood. All 8 steroids were measured simultaneously in 0.1 ml plasma by UPLC-MS/MS. Samples of 905 children were measured and grouped in five age groups.

Results: The assay was linear up to 70 ng/ml (700 ng/ml for F; r2 > 0.992). The limit of detection ranged between 0.01 ng/ml for DOC and 0.07 ng/ml for E. Correlations with radioimmunoassays yielded a coefficient of determination between 0.82 and 0.99. Reference data are reported as a function of age and sex.

Conclusions: The UPLC-MS/MS method presented here for the simultaneous detection of eight C-21 adrenal hormones together withs the detailed reference ranges for children provides a valuable methodology for assessing adrenal steroids in clinical routine and research.

Outcome of Surgical Treatment of 200 Children with Cushing's Disease. Russell R Lonser, Joshua J Wind, Lynnette K Nieman, Robert J Weil, Hetty L DeVroom & Edward H Oldfield. JCEM 2012-3604

Abstract: Factors influencing the outcome of surgical treatment of pediatric Cushing's disease (CD) have not been fully established. The authors prospectively examined features influencing clinical, imaging, endocrine & operative outcomes of surgery for pediatric CD in consecutive patients treated at the National Institutes of Health (NIH) from 1982 through 2010.

Results: Two hundred CD patients (106 F, 94 M) were included. Mean age at symptom development was 10.6 ± 3.6y (range, 4-19y). Mean age at NIH operation was 13.7 ± 3.7y. Twenty-seven patients (13%) had prior surgery at another institution. MRI identified adenomas in 97 patients (50%). When positive, MRI accurately defined a discrete adenoma in 96 of the 97 patients (99%), which was more accurate than the use of ACTH ratios during inferior petrosal sinus sampling to determine adenoma lateralization (accurate in 72% of patients without prior surgery). After surgery, a total of 195 of the 200 patients (98%) achieved remission: postop 189 [97%] were hypocortisolemic; 6 [3%] were eucortisolemic. Factors associated with initial remission (P<0.05) included identification of an adenoma at surgery, immune-histochemical ACTH-producing adenoma, and noninvasive ACTH adenoma. Younger age, smaller adenoma, and absence of cavernous sinus wall or other dural invasion were associated with long-term remission (P < 0.05). A minimum morning serum cortisol of less than 1 µ g/dl after surgery had a positive predictive value for lasting remission of 96%.

Conclusions: With rare disorders, such as pediatric CD, enhanced outcomes are obtained by evaluation and treatment at centers with substantial experience. Resection of pituitary adenomas in pediatric CD in such settings can be safe, effective, and durable. Early postoperative endocrine testing predicts lasting remission. Because lasting remission is associated with younger age at surgery, smaller adenomas, and lack of dural invasion, early diagnosis should improve surgical outcome.

Height deficit and impairment of the GH/IGF-1 Axis in patients treated for acute lymphoblastic leukemia during childhood. Vilela MIOP, Serravite M, Oliveira NB, de Brito PC, Ribeiro-Oliveira Jr. A, Viana MB. Horm Res Paediatr 2013;79:9–16

Abstract: ***Background:*** Endocrine complications after acute lymphoblastic leukemia (ALL) are common. ***Methods:*** Final height, GH/IGF-1 axis, and body mass index were analyzed after 13.7 (7.0–20.7) years from diagnosis in 34 boys aged <12 years at diagnosis and 41 girls <10 years at diagnosis. A modified German BFM-83 ALL protocol included (n = 42) or did not include (n = 33) prophylactic cranial irradiation. In 27 patients, GH after insulin tolerance test, IGF-1, cortisol, free T_4 and estradiol/testosterone were determined.

Results: Final height was significantly reduced (mean Z-score for height between final height and diagnosis, ΔHAZ = –0.61, p = 0.0001). At that point, 3 patients were obese (4%) and 17 were overweight (22.7%). Patients aged ≤4 years at diagnosis and those irradiated had a greater loss in final height (p = 0.001 and p = 0.008, respectively). Abnormalities in GH/IGF-1 axis were observed in 4 patients: 3 had a GH peak <6 ng/ml and 1 had a serum IGF-1 concentration <25 ng/ml. Growth deficit was significantly higher in patients with hormonal deficiency (p = 0.006).

Conclusions: Treatment of ALL during childhood is associated with final height deficit. Young age at diagnosis and radiotherapy were the major risk factors. GH/IGF-1 deficiency was found particularly in irradiated patients, even though it was detected in 1 non-irradiated patient.

Some more interesting papers

Leena Priyambada, leenapriyambada@gmail.com

Efficacy of generic vs. brand-name L-thyroxin

Generic and brand-name L-thyroxine are not bio-equivalent for children with severe congenital hypothyroidism. Jeremi M Carswell, Joshua H Gordon, Erica Popovsky, Andrea Hale, and Rosalind S Brown. ***JCEM* 98: 610–617, 2013**

In a 16-week, open-label, randomized, controlled, crossover trial, 31 children with an initial serum TSH concentration >100 mU/L, were randomly assigned to receive their usual L-T4 replacement dose as either Synthroid or generic (Sandoz) for 8 weeks sequentially. The serum TSH concentration was significantly lower after 8 weeks of Synthroid than after generic drug (P < .002), but their free T4, T3 levels did not differ significantly. The difference in TSH was restricted to patients with congenital hypothyroidism (CH) (P<.0005). Synthroid and an AB-rated generic L-T4 are not bioequivalent for patients with severe hypothyroidism due to CH, probably because of diminished thyroid reserve. The authors recommend not to substitute L-T4 formulations in patients with severe CH, particularly in those < 3 yr of age.

Generic Levothyroxine Compared With Synthroid in Young Children With Congenital Hypothyroidism

Jefferson P Lomenick, Lulu Wang, Steve B Ampah, Benjamin R Saville & Fayrisa I Greenwald. ***JCEM 98: 653–658, 2013***

In a 5y retrospective study, records of 0–36 months old with congenital hypothyroidism treated with either Synthroid exclusively (35) or generic LT4 exclusively

(27) were analyzed. Generic LT4 treatment resulted in similar or better control of hypothyroidism compared with Synthroid, as assessed by the clinical outcomes of TSH variance and frequency of LT4 dosing adjustments.

Suggested further reading: Editorial - Generic vs. name brand L-thyroxine Products: Interchangeable or Still Not? James V Hennessey. ***JCEM 98(2):511–514, 2013.***

The previous 2 studies on clinical data of L-thyroxin (LT4) equivalence which seem to reach opposite conclusions, are beautifully analyzed, and the author's concluding advice was that physicians should:

1) alert patients that preparations may be switched at the pharmacy;

2) encourage patients to ask to remain on the same preparation at every pharmacy refill; and

3) make sure patients understand the need to have their TSH retested and the potential for dosing readjusted every time their LT4 preparation is switched.

Congenital Hypothyroidism with eutopic thyroid gland: analysis of clinical and biochemical features at diagnosis and after re-evaluation. Sarah Rabbiosi, Maria Cristina Vigone, Francesca Cortinovis, Ilaria Zamproni, Laura Fugazzola, Luca Persani, Carlo Corbetta, Giuseppe Chiumello, and Giovanna Weber. ***JCEM 98: 1395-1402, 2013***

Changes in screening strategies for CH have led to an increased detection of mild forms of CH. Retrospective analysis of 84 children with CH (newborns with serum TSH persistently higher than 10 mU/L and normal or low free thyroxin (fT4) values) and eutopic thyroid gland treated was done. They all underwent clinical re-evaluation after the age of 3years, based on thyroid function testing after l-thyroxin therapy withdrawal, thyroid ultrasonography, and (123)I scintigraphy with perchlorate discharge test. Only one-third of patients with CH and eutopic thyroid gland had permanent hypothyroidism and needed to continue l-thyroxin therapy after re-evaluation. 27.4% had persistent hyperthyrotropinemia (TSH 5-10 mU/L), and 38.1% had transient hypothyroidism. Major risk factors for permanent CH were prematurity, first-degree familial history of goiter/nodules, thyroid hypoplasia at diagnosis, and high l-thyroxin requirements at follow-up. There was a high percent of preterm children (22.6%) compared to the general Italian population (6.75%), and they showed a high prevalence (52.7%) of permanent CH. All patients born after IVF showed permanent CH. Neonatal TSH values <20 mU/L constituted 76.2% of patients. The definitive diagnosis at re-evaluation in patients with lower screening TSH values (<20 mU/L) show the same distribution as patients with screening TSH >20 mU/L. Associated malformations were present in 14.3% of patients (n = 12), with a predominance of cardiac defects (10 cases, among which 4 were severe and 1 was associated with esophageal atresia). There was a significant difference in the mean L-T4 dose before withdrawal among the 3 groups ($P < .001$). In particular, all patients with permanent CH had an L-T4 requirement above 2 mcg/kg per day prior to the re-evaluation.

Prevalence and long-term follow-up outcomes of testicular adrenal rest tumors in children and adolescent males with congenital adrenal hyperplasia. Aycan Z, Bas VN, Cetinkaya S, Yilmaz Agladioglu S, Tiryaki T. ***Clin Endocrinol (Oxf);78(5):667-72, 2013***

60 boys and adolescent males with CAH, age 2-18y, were screened for testicular adrenal rest tumors (TARTs) by scrotal ultrasonography (US). TART prevalence was 18.3% (n=11) in 2–18y of age. The youngest patient with TART was 4yo, whereas 8 patients with TARTs were at puberty. Only 2 had tight metabolic control: 8 had stage 2, one had stage 4, and 2 had stage 5 rest tumors. In 4 patients with stage 2 TARTs, tumors disappeared after high-dose steroid treatment and did not recur; in 2, the tumors shrank. Testis-sparing surgery was performed in one patient with stage 5 tumor.

The total follow up duration and the study design is not very clear in the study.

High diagnostic accuracy of subcutaneous Triptorelin test compared with GnRH test for diagnosing central precocious puberty in girls. Analıa V Freire, Marıa E Escobar, Mirta G Gryngarten, Andrea J Arcari, Marıa G Ballerini, Ignacio Bergada and Marıa G Ropelato. ***Clin Endocrinology 78, 398–404, 2013***

A prospective, case–control, randomized clinical trial was performed on 46 girls with suspicion of CPP to evaluate the diagnostic accuracy of Triptorelin test (subcutaneous Triptorelin acetate (0.1 mg/m2, to a maximum of 0.1 mg) compared to the GnRH test (intravenous GnRH 100 mcg) with blood sampling at 0, 3 and 24 h for LH, FSH and estradiol ascertainment. Using receiver operating characteristic curves, maximal LH response (LH-3h) under Triptorelin test ≥7 IU/l by immunofluorometric assay (IFMA) or ≥ 8 IU/l by electrochemiluminescence immunoassay (ECLIA) confirmed the diagnosis of CPP with specificity of 1.00 and sensitivity 0.76. Considering either LH-3h or maximal estradiol response at 24h (cut-off value, 295 pM), maintaining the specificity at 1.00, the test sensitivity increased to 0.94 and the diagnostic efficiency to 96%. The first GnRH test did not detect the activation of the HPO axis in two patients of 33 CPP; however, the Triptorelin test showed pubertal response that was confirmed by the clinical progression and the second GnRH test. Mean LH at 3h was almost four times higher in CPP than in premature thelarche. However, the sensitivity of LH-3h for CPP diagnosis was not found optimal by the authors because 8 of 33 (~25%) CPP girls had levels below the cut-off. The ovarian response determined by E2-24h sample with a cut-off 295 pM (80 pg/ml) raised the test sensitivity. The authors found that the use of both biochemical markers had the best diagnostic accuracy (96%) comparing with the reference standard test.

Genotype and phenotype correlations in 417 children with Congenital Hyperinsulinism. KE Snider, S Becker, L Boyajian, S-L Shyng, C MacMullen, N Hughes, K Ganapathy, T Bhatti, CA Stanley & A Ganguly. ***JCEM 98: E355–E363, 2013***

Mutation analysis carried out at the Children's Hospital of Philadelphia in 417 children with congenital HI seen between 1997 and 2010; for the ATP-sensitive potassium (KATP) channel genes (*ABCC8* and *KCNJ11*), *GLUD1*, and *GCK* with supplemental screening of rarer genes, *HADH*, *UCP2*, *HNF4A*, *HNF1A*, and *SLC16A1*.

Diazoxide-unresponsive probands: Mutations were identified in 91%; 89% carried KATP mutations; 2% had *GCK* mutations. 53% of diazoxide unresponsive probands had focal HI.

Focal HI: Recessive KATP mutations were detectable in 97% cases (no single maternal transmission was seen).

Diazoxide-responsive probands: only 47% of had a positive mutation; 42% were *GLUD1*, 41% were dominant KATP mutations, and16% were in rare genes.

Children with *GLUD1*, *HADH*, *HNF4A*, *HNF1A*, and *UCP2* mutations were exclusively diazoxide-responsive, whereas children with *GCK* mutations and recessive KATP mutations were solely diazoxide-unresponsive. However, children with dominant mutations of the KATP genes were either diazoxide-responsive or diazoxide-unresponsive. Identification of a monoallelic recessive KATP mutation appears to predict focal HI with high sensitivity and specificity.

MORE NEWS!
ACTIVITIES BY MEMBERS

ESICON 2012, Kolkata: Pearls on bone health

Anju Virmani

At ESICON 2012, wonderfully organized at Kolkata by Dr Subhankar Chowdhury and Dr Sujoy Ghosh, the pediatric sessions were grouped on the last day. Here are some pearls on bone health by Dr M Levine:

Total body less head (TBLH) is a more accepted analysis than hip in kids of this age; the open growth plates affect the shape of hip and growth plates, makes the hip a particularly poor site for analysis of bone density. Positioning is also problematic in all kids.

Height Z score adjustment is as easy as visiting: http://www.bmdcspublic.com/ Thanks to the BMDCS and NICHD everyone with internet access has this calculator available to do height z adjustments on bone density.

During the growth spurt in mid to late puberty all kids experience a transient dip in bone density as their longitudinal bone growth exceeds the physiological rate of bone mineralization. This is in part the basis for the increase in fractures that occurs in adolescents (plus some increase in risk taking behavior, I am sure). This lag in mineralization is about six months.

World Obesity Day: Aurangabad

Priti Phatale prit.hemant@gmail.com

In the 20th century, obesity emerged as one of twin epidemics along with diabetes. We all know that an urbanized life style is the key factor for this. Obesity is responsible for diabetes, hypertension and coronary heart disease.

One in three adults is overweight in India. It is observed that obesity is increasing in children as well, causing a rise in diabetes and hypertension. In India, one in four children from metro cities and one in six children from non-metro cities is overweight.

At the Samrat Endocrine Institute of Obesity, Diabetes & Thyroid, New Rokadîya Hanuman Colony, Aurangabad, we found that nearly one third of obese children and adolescents had hypertension while 4% had type 2 diabetes. Complication of both diseases will occur at a young age. Because of this, the nation's quantity as well as quality of working hours, and therefore the economy will be affected. We have some suggestions for change in the urbanized lifestyle:

i) The city should have separate roads for cycles and pedestrians so that safe walking and cycling can increase.
ii) Schools should have compulsory playgrounds.
iii) Marks should be given for sports, and these should be included in the final marks.
iv) Sports marks should be included in competitive exams for careers.
v) Sugary drinks should be banned.
vi) Calorie dense foods available in the market should be banned.
vii) Food provided in school and college canteens must be as per a dietician's advice, and must not include high fat foods.

On the occasion of 'World Obesity Day' (26th November 2012), we submitted these suggestions to the Commissioner of AMC and the Collector of Aurangabad District, along with local IAP and IMA. A Press conference was also held on the occasion with local IAP and IMA at IMA Hall, Aurangabad, at which 22 journalists were present. They were given copies of these suggestions. We also pointed out that

* Germany has separate roads for cyclists and pedestrians.
* Parts of USA have banned sugary drinks and foods with trans-fats. Because of this childhood obesity is already on a down slope in USA.

Eight leading local newspapers gave very good coverage of this occasion.

DIABETESINDIA 2013, Kochi: Some Pearls

Anju Virmani

The 5th World Congress of DiabetesIndia at Kochi – 18-21 April 2013 – was organized by Drs SM Sadikot, SR Aravind, and Banshi Saboo. Over 150 national and 30 international speakers delved into every aspect of diabetes. Some pearls:

* Not just type 2, but also type 1 incidence is rising in several parts of the world, especially in the under 5s.
* Routine home checking of urinary ketones when BG is more than 250 mg/dl is important, since corrective insulin doses need to be doubled if ketosis is present.
* Ketone strips often become less reliable after a month or so of opening the bottle. However, it is cheaper to throw away a bottle once the strips go bad, than to develop full-fledged ketoacidosis needing hospital admission, because early ketosis was missed!
* The commonest cause of death in T1DM remains lack of insulin.
* The TODAY study showed that T2DM in adolescents is far more ominous than T2DM in adults, with poor response to therapy.
* Early initiation of insulin at presentation of T2DM is perhaps the best strategy. As soon as glucotoxicity settles, insulin should be decreased/ stopped to avoid further weight gain.
* CGMS is not always welcomed by patients. Several are embarrassed, especially by the alarm going off, and/ or stressed at the prospect of dealing with a complicated gadget.
* Depression is a serious problem in diabetes; behavior therapy may improve not just depression, but also glycemic control.
* Patient Health Questionnaire (PHQ2) is an effective screening tool for depression, as it is easy to administer, and in adolescents has 74% sensitivity and 75% specificity.
* Famous actor Kamal Haasan developed diabetes at age 16y.

CME, IAP Muzzaffarpur, Bihar

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At a CME organized by IAP, Muzzafarpur, on 23rd January 2013, Dr Sanjay Kumar (Diksha Child Care, Hospital Road, Sitamarhi) spoke on "Short stature in children, and role of growth hormone therapy". The session was chaired by Dr Prabha Banarjee, retired Professor of Pediatrics, Medical College, Kolkata, and Dr Anish Chatterjee, Associate Professor, Calcutta National Medical College. It was attended by about 20 eminent pediatricians of the city.

Interactive Forum @ Delhi/ NCR: Feb 2013

Bindu Kulshreththa, drbindu25@yahoo.co.uk

The first interactive forum meeting of the Delhi ISPAE members was organized by Dr Anju Seth and Dr Bindu Kulshreshtha on 22 Feb 2013 in Kalawati Saran Children's Hospital. It was attended by Drs AC Ammini, Anju Seth, Anju Virmani, Bhanu Kiran Bhakhri, Bindu Kulshreshtha, Ganesh Jevalikar, Rajesh Khadgawat, Rajni Sharma, Sapna Mittal, Sona Abraham, Sangeeta Yadav, and Sonia Makhija. Dr Seth explained that the agenda of this meeting would be how to take this interactive forum for pediatric endocrinology forward, taking into account inputs from the members. One key aim was to discuss difficult cases, so that we could benefit from each other's knowledge and experience.

Dr Virmani presented a perplexing case of an Afghan boy with sexual precocity and severe hypertension. The 17 OHP levels had been borderline high at diagnosis, and had remained largely unchanged in spite of hydrocortisone replacement, which the parents insisted they were compliant with. Though the differential diagnoses (3β-HSD deficiency, testotoxicosis and McCune Albright) were discussed, the group strongly doubted compliance, and Dr Ammini suggested checking for suppression of 17OHP and hypertension after a brief admission for giving supervised parenteral dexamethasone. She discussed her experience with the use of dexamethasone in children with CAH. Issues related to height and 17OHP levels and steroid use were discussed.

Dr Makhija presented a girl with thalassemia, amenorrhea and diabetes mellitus, with a brief review bringing out the interesting and complex management issues, including the difficulty of assessing glycemic control since A1c could not be relied upon. Lastly, Dr Abraham presented a rare case of a 6mo old breast fed baby with obesity. Afterwards, all agreed that such sessions would be useful, and decided to meet next at RML Hospital on 26th April from 4-6pm.

A Day Full of Fun!

Chhavi Kohli (Diabetes Educator, Medanta), Ganesh Jevalikar

A picnic for children with type 1 diabetes and their families was organized by the Division of Endocrinology, Medanta Medicity Hospital on 10th February 2013 at Leisure Valley Park, Sector 29, Gurgaon. It was organized and conducted by Dr Beena Bansal, Dr Ganesh Jevalikar, Ms Chhavi Kohli, Ms Shweta Singh and Dr Arundhati Dasgupta. Dr Ambrish Mithal (Chairman of the division) interacted with and guided the families. The event was supported by Bayer and Eli Lilly. Twenty five

families attended the picnic. Fun activities like antakshari, drawing competition, game of kho kho (**see photo**), walking race for mothers, running race for fathers and a game of straw made everyone's day enjoyable. Families had open discussion and sharing of experiences at a more comfortable level. It was different from the usual support group meeting as here the emphasis was on fun with learning. Whatever diabetes does, it does not stop you from having fun and enjoying life!!

Growth monitoring workshop: Surat

Samir Shah, dr_samirshah@yahoo.com

A workshop on growth monitoring was organized by the Surat Pediatric Association at Surat, Gujarat on 17th March, 2013, in memory of our teacher, the late Dr HK Gaur. The 15th Dr HK Gaur oration was conferred upon Dr Vaman Khadilkar (Pune), whose topic was "Anthropometry as a diagnostic tool in pediatric practice". The workshop was conducted by Dr Khadilkar, assisted by Drs Supriya Phanse and Ruchi Nadir, and attended by about 90 delegates, including PG students. The workshop consisted of an introduction to different kinds of growth charts, growth monitoring in normal and abnormal children, estimation of bone age, and hands on training regarding use of growth charts in different clinical scenarios.

Prof Ranke's visit to Mehta Hospital, Chennai

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Professor Michael B Ranke visited Mehta Children's Hospital, Chennai, on March 29th 2013 and delivered a talk on "Principles of growth analysis – Lessons from a single case". The talk highlighted the basics of growth in children, the importance of routine measurement in clinical practice, the importance of taking proportions and calculation of Standard Deviation Scores (SDS). The meeting was chaired by the Head, Department of Pediatrics, Dr S Thangavelu, and attended by trainees in Pediatrics and all the consultants of the hospital. It was followed by an interaction with other practicing pediatric endocrine consultants, including Dr Hemchand K Prasad, Dr Lakshmi (Institute of Child Health) and Dr Kannan (Senior Endocrinologist). The program was highly appreciated, since it was a good learning experience for the pediatric trainees and pediatricians in the department.

Prof Ranke visits Chennai/ Delhi/ Mumbai

As part of the Endosphere program, Prof Michael B Ranke, Emeritus Professor, University Children's Hospital, Tubingen, Germany, gave talks in 3 metros. On 29th March, he addressed 21 clinicians (Ped Endos, endocrinologists and pediatricians) from Chennai, Hyderabad and Bangalore, in a session chaired by Dr Usha Sriram. This was followed by an interactive panel discussion, moderated by Dr Jayashree Gopal. The panellists were Prof Ranke, Dr PG Sundararaman and Dr Jayanthy Ramesh.

In Delhi, more than 60 doctors (from Delhi, Punjab, Rajasthan and Ahmedabad) attended the meeting on 30th March. Prior to the lecture, Dr Sangeeta Yadav moderated a session of case discussions, chaired by Dr Kochar. Prof Ranke's talk was followed by a panel discussion moderated by Dr Archana Arya. The panellists were Prof Michael Ranke, Dr Anju Virmani and Dr Anurag Bajpai.

In Mumbai, the meeting and Q&A session was chaired by Prof Nalini Shah, and attended by more than 50 doctors from Mumbai, other parts of Maharashtra, Gujarat, Indore and Andhra.

Growth Workshops & other activities

Anurag Bajpai, dr_anuragbajpai@yahoo.com

Talk on Polyuria at PEDICON, Kolkota, Jan 2013

Dr Anurag Bajpai delivered a talk on "Approach to polyuria: on 17 January at the Kolkota PEDICON.

II Practical Pediatric Endocrinology Course: Basaidarapur, New Delhi

The second Practical Pediatric Endocrinology Course (PPEC) was organized at the ESI Medical College, Basaidarapur, New Delhi on 22 February 2013. The one day course used 6 case based modules – covering growth, puberty, thyroid, diabetes, calcium & bone, and electrolyte disorders – to provide information about common Pediatric Endocrine issues to pediatricians. The faculty consisted of Prof. Anju Seth, Prof. Sangeeta Yadav, Dr Rajesh Khadgawat, Dr Anurag Bajpai, Dr Rajni Sharma and Dr Sapna Mittal. It was attended by 60 participants from the NCR region. They were provided a comprehensive resource book covering all aspects dealt in the meeting.

IAP Gurgaon Growth Workshop: Feb 2013

The 7th Growth Workshop in a series of Growth Modules was held by Dr Anurag Bajpai under the auspices of IAP Gurgaon, and attended by 60 participants.

Bihar PEDICON: Patna, March 2013

Pre Congress Growth Workshop: The 8th Growth Workshop was held on 1st March by Drs Sanjay Kumar, Akhilesh Jaiswal and Anurag Bajpai under the auspices of Bihar PEDICON, and attended by 70 registrants.

Plenary session: Dr Bajpai gave a plenary lecture on "Approach to Growth Failure" on 2nd March 2013.

Interpreting Growth Charts: Aligarh, March 2013

Dr Bajpai gave a talk on "Interpretation of Growth Charts" at an International Conference on Recent Advances in Diabetes and Endocrinology at JLNMC Medical college, Aligarh.

Growth workshop, Aligarh: March 2013

The 9th Growth Workshop in a series of growth modules was held under the auspices of Department of Pediatrics, JLNMC Medical College, Aligarh with active participation of residents and practicing pediatricians.

CMEs and other activities

Abhishek Kulkarni, endocrinewellnessclinic@gmail.com

Marathwada CME- Aurangabad- April 2013

A full day Pediatric Endocrinology CME was held at MGM Medical College, Aurangabad, on 7 April 2013 as a part of World Health Day celebrations. It was organized by IAP Aurangabad branch, with an academic grant from Novo Nordisk. Highlights included sensitizing the pediatric fraternity to the newborn thyroid screening program, devising an algorithmic approach to short stature, approach to pediatric obesity, insight on pubertal disorders and a hands-on training workshop on the use of growth charts. The faculty included Dr Abhishek Kulkarni (Mumbai), Dr Rahul Jahagirdar & team (Pune) and Dr Hemant & Dr Priti Phatale (Aurangabad). The CME was attended by over 150 pediatricians from across Marathwada, and well appreciated. It was also used as an opportunity to increase ISPAE membership.

Growth Update – Mumbai – April 2013

On 14 April 2013, a growth update was organized in Mumbai under the aegesis of IAP Mumbai, sponsored by Eli-Lily India. The half day update was well attended by nearly 80 pediatricians and pediatric residents from across Mumbai. The clinical approach and anthropometric tools in evaluation of statural disorders was discussed. This was followed by a discussion on the FDA approved indications of growth hormone therapy. Case presentations by trainees followed by analysis and interpretation by faculty were appreciated. The faculty included Drs Vaman Khadilkar (Pune), Nalini Shah and Abhishek Kulkarni (Mumbai).

Pediatric Obesity- a neglected hazard

To propagate the WHO statement "Obesity is one of the most neglected health problems with significant adverse consequences" a CME was organized by the Endocrine Wellness Clinic, Mumbai, for the first contact physician community under the aegesis of IMA Mumbai. The prime focus of the CME was to sensitize family physicians about definitions of overweight and obesity in children, the concepts of calculation of BMI, use of BMI percentile charts in children, awareness of health hazards of pediatric obesity and a brief overview of causes and management of pediatric obesity. The faculty were Drs Abhishek Kulkarni (Jaslok Hospital, Mumbai) and Parag Tamnkar (Pediatrician and Clinical Geneticist, ICMR, Mumbai). Over 200 IMA members, predominantly family physicians, attended.

Interactive Forum @ Delhi/ NCR: Feb 2013

Deepak Khandelwal khandelwalaiims@gmail.com

The Dept. of Endocrine Sciences, Maharaja Agrasen Hospital, New Delhi, organized a very successful Update on Thyroid and Parathyroid disorders on 21st April 2013, attended by over 100 delegates. Organized by Dr Vivek Aggarwal, Head, Endocrine Surgery, and Dr Deepak Khandelwal, Consultant Incharge, Diabetes & Endocrinology, this was an attempt to bring endocrinologists and endocrine surgeons on a single platform. The faculty included Drs SK Wangnoo (Apollo), Rajesh Khadgawat & Mohd Ashraf Ganie (AIIMS), Gaurav Aggarwal (SGPGI, Lucknow), Tarun Sekhri (INMAS), Ajay Ajmani (BLK Hospital), Bindu Kulshreshtha (RML), and Sameer Aggarwal (PGI, Rohtak). Our aim was to discuss basics of thyroid and parathyroid endocrinology, endocrine surgery, recent advancement, challenges and controversies. The proceedings will be made available soon at the website of our hospital. Given the interest of the audience, more educational updates on endocrine sciences are planned.

CONGRATULATIONS!

Our member **Dr Sameer Agarwal** writes "… I have been awarded the AV Gandhi Award 2012 in Kolkata (Best Clinical Acumen- Spot case diagnosis in Endocrinology). Having cleared DM in December 2012, I have joined as Associate Professor in the Dept. of Medicine, PGIMS Rohtak, and started the Endocrinology Clinic there."

Our member **Dr Sunil Kumar Kota** writes

**'I was awarded the American Association of Clinical Endocrinologists (AACE) International Travel Grant under "Fellow in training" category to attend the 21st AACE Annual meeting at Philadelphia from May 23-27, 2012. Dept. of Science and Technology, Govt. of India provided additional financial support. My presentation on "Ileal interposition with sleeve gastrectomy/ diverted sleeve gastrectomy for treatment of type 2 diabetes" was adjudged as the "Critically Acclaimed Best Poster".

** 'I also received an ESPE Travel Grant to attend the ESPE annual meeting in Leipzig, Germany, Sep 20-23, 2012, where I presented 2 electronic posters. Further financial support was provided by ICMR.

** 'I was selected and therefore invited to participate in International Society for Pediatric and Adolescent Diabetes (ISPAD) Research Course for Physicians 2012 held at Lodz, Poland from 16th- 21st November, 2012, where I had the opportunity of presenting 1 case report and 1 research proposal on type 1 diabetes.

** I was declared as the author with maximum contribution in terms of publications for the year 2012, in Indian Journal of Endocrinology & Metabolism (Pubmed indexed journal of Endocrine Society of India) in its medical writing workshop organized at New Delhi and Hyderabad.'

FORTHCOMING MEETINGS

1. **PES 2013:** Annual Meeting of Pediatric Endocrine Society (USA) (formerly LWPES): Washington DC. 4-7 May, 2013.
2. **ENDO 2013:** Annual Meeting of the Endocrine Society: San Francisco, USA. 15-18 June, 2013. Email: societyservices@endo-society.org
3. **ISBMR 2013**: 9th Annual meeting of the Indian Society for Bone & Mineral Research: SKIMS, Srinagar. 7-8 September, 2013. Contact Dr Bashir Laway, isbmrkashmir2013@gmail.com
4. **ESPE-PES**: 9th Joint ESPE/ PES Meeting: Milan, Italy: 19-22 September, 2013. Email: espe@eurospe.org
5. **ISPAD 2013**: 39th Annual Meeting: Gothenburg, Sweden: 16-19th October 2013.
6. **ESICON 2013:** 43rd Annual Meeting of the Endocrine Society of India: Bhopal: 18-20 October 2013. Organizing Secy: Dr Sushil Jindal, www.esicon2013bhopal.com
7. **IDF 2013**: World Diabetes Congress: Melbourne, Australia: 2-6 December 2013. Deadlines: abstract submission 22 April 2013; early registration: 14 June 2013. www.worlddiabetescongress.org
8. **PEDICON 2014:** 51st Annual Meeting of the IAP: Indore: 8-12 January, 2014. Organizing Secy: Dr VP Goswami, drvpgoswami@gmail.com, pedicon2014indore@gmail.com
9. **PES 2014:** Annual Meeting of the PES: Vancouver, Canada. 3-6 May, 2014.
10. **ENDO 2014:** Annual Meeting of Endocrine Society: Chicago, USA. 21-24 June, 2014. Email: societyservices@endo-society.org
11. **ESPE 2014**: 53rd ESPE Meeting: Dublin, Ireland: 18-21 September, 2014. Email: espe@eurospe.org
12. **ISPAD 2014**: 40th Annual Meeting: Toronto, Canada.
13. **PES 2015:** Annual Meeting of the PES: San Diego, CA. 25-28 April, 2015.
14. **ENDO 2015:** Annual Meeting of the Endocrine Society: San Diego, CA. 20-23 June, 2015. Email: societyservices@endo-society.org
15. **ESPE**: 54th ESPE Meeting: Barcelona, Spain: 9-12 September, 2015. Email: espe@eurospe.org
16. **ISPAD 2015**: 41st Annual Meeting: Brisbane, Australia.
17. **PES 2016**: Annual Meeting of the PES: Baltimore, Maryland. 30 April-3 May, 2016.
18. **PES 2017**: Annual Meeting of the PES: San Francisco, California. 6-9 May, 2017.

MEMBERS' PUBLICATIONS

*** Widespread vitamin D deficiency among Indian health care professionals. Maria Beloyartseva, Ambrish Mithal, Parjeet Kaur, Sanjay Kalra, Manash P Baruah, Satinath Mukhopadhyay, Ganapathy Bantwal, Tushar R Bandgar. International Osteoporosis Foundation and National Osteoporosis Foundation 2012. Arch Osteoporos, DOI 10.1007/s11657-012-0096-x

Summary: Information on vitamin D status of Indian health care professionals is limited. Among 2,119 subjects studied, just 6% were found to be sufficient in vitamin D status. There is urgent need of an integrated approach to detect and treat vitamin D deficiency among health care professionals to improve on-the-job productivity.

*** Tumor necrosis factor alpha S238G/A (rs 361525) gene polymorphism predicts progression to type 2 diabetes in an Eastern Indian population with prediabetes. Deep Dutta, Subhadip Choudhuri, Samim Ali Mondal, Indira Maisnam, Abu Hena Hasanoor Reza, Sujoy Ghosh, Subhankar Chowdhury, Basudev Bhattacharya, Satinath

Mukhopadhyay. Department of Endocrinology & Metabolism, IPGMER & SSKM Hospital, Kolkata. # 2013 Published by Elsevier Ireland Ltd. Diab Res & Clin Practice (2012). Doi.org/10.1016/j.diabres.2012.12.007
Individuals with prediabetes (IPD) have a high annual risk of progression to type 2 diabetes. TNFa and IL6 interfere with insulin signaling. SNP study in the promoter region of TNFa and IL6 have suggested their role in increased IR and diabetes complications. No study has evaluated these SNPs in IPD. This study aimed to evaluate the relationship of these SNPs with BMI, IR in normal individuals (NI) and IPD, and their effect on prediabetes progression. 16 IPD had reverted to normoglycemia and 18 progressed to diabetes. TNFa _238AA/GA genotypes were significantly more common in IPD, had higher TNFa, higher progression to diabetes and lower reversal.

*** Rapidly evolving hypopituitarism in a boy with multiple autoimmune disorders. Jevalikar G, Wong SC, Zacharin M. Department of Endocrinology and Diabetes, The Royal Children's Hospital, Melbourne, Victoria, Australia. J Paediatr Child Health. 2013 Apr 16. [Epub ahead of print]

NEWS YOU CAN USE

Subscribing to the pediatric endocrine Yahoo group: New users can send an email to peds-endo-subscribe@yahoogroups.com. If the email address is easily recognizable as one from a medical institution, Dr Brenner will approve the member without contacting the person. If the email address is non-institutional, the applicant has to email name and institution to Dr Brenner at peds-endo-owner@yahoogroups.com.

Diabetes diagnosed before 6 months is likely to be monogenic neonatal diabetes, for which it is important to get a molecular diagnosis made as soon as possible. Dr Andrew Hattersley and his team at Exeter, UK, are offering a free service for all neonatal diabetes genes for the next 7 years. Details are available on www.diabetesgenes.org. The baby's and both parents' EDTA blood (3 ml) should be sent at room temperature (i.e. not on ice or dry ice).

HOW TO WRITE A CLINICAL TRIAL PROTOCOL: A RESEARCHER'S TOOLKIT

Writing a good research protocol is important for several reasons. Good protocols are more likely to be approved by regulatory bodies; to be funded; and to result in good studies. An excellent guide is provided by Chan et al (2013): drafted by an international team and titled the SPIRIT 2013 Statement (Standard Protocol Items: Recommendations for Interventional Trials). The 42 pages long document presents a checklist of items that a well-written clinical trial protocol must contain. It comprehensively describes all the important elements of a clinical trial protocol under 33 headings, from title to appendices. Many headings list subheadings as well, and all headings and subheadings contain descriptions with examples to help readers understand what must be done. **The free full text of SPIRIT 13 is available here.** http://www.bmj.com/content/346/bmj.e7586.

Reference: Chan A-W, Tetzlaff JM, Gotzsche PC, Altman DG, Mann H, Berlin JA et al. SPIRIT 2013 explanation and elaboration: guidance for protocols of clinical trials. BMJ 013; 346: e7586.

BOOKS FROM KARGER

1. Yearbook of Pediatric Endocrinology 2012. Ed Ken Ong (Cambridge) & Ze'ev Hochberg (Haifa). Price USD 82.00, EUR 58.00
2. Polycystic Ovary Syndrome. Ed Djuro Macut (Belgrade), Marija Pfeifer (Ljubljana), Bulent Okan Yildiz (Ankara), Evanthia Diamanti-Kandarakis (Athens). Price CHF 169.00

For more details please check www.karger.com

The Food Safety and Standards Authority of India (FSSAI) - which put many products under its scanner over the misleading claims - has initiated proceedings in 38 cases involving leading brands. [These include PediaSure, Kelloggs Special K, Britannia Nutrichoice, Kissan Creamy Spread, Rajdhani Besan, Saffola, Engine Mustard Oil, Bournvita Little Champs, Horlicks…] The food regulator, which has received complaints against the products, has begun prosecution proceedings in 19 cases under the Food Safety and Standards (FSS) Act. – Mail Today 29 November 2012.

It looks as if wherever you go in the world, the difference between the average heights of men and women is the same I.e. about 5' or ~ 13cm. So, it is a genetic difference. The actual heights vary from country, depending upon factors such as nutrition, health etc. But the number 13 does not vary from place to place. So, that is the basis for the number 13 for use in calculating the Mid Parental Height.