



EDITORIAL

We are glad to present the October newsletter! We extend our heartfelt gratitude and thanks to every member for their invaluable contribution.

In this edition we have a brief but comprehensive article on 'Precocious Puberty in girls - Basic approach to evaluation'. Sexual Maturity Rate Scoring should be a part of routine examination in office practice when children come with other ailments to identify early maturation.

We look forward for interesting articles.

Happy reading!

Warm regards,

Dr Nandeesh

Dr Priya Shivalli



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Precocious puberty in girls – basic approach to evaluation

Dr Suman Rath,
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Definition

Precocious Puberty is defined as onset of stage II breast development before 8 years of age .

Consequence of early puberty

It leads to early maturation and short stature as an adult. Younger children may not be prepared to handle menstrual cycles and the physical and psychosexual changes associated with it, thus the need for early identification and treatment.

Causes

It can be due to **Central GnRH dependent** causes like CNS - tumours , infections , post trauma, etc. or **Peripheral non-GnRH dependent** causes like ovarian tumours, CAH , hypothyroidism etc. Most of the time no underlying pathology is detected in girls.

Progression

Central precocious puberty is common among Precocious Puberty with rapid progression which usually follows the normal sequence of thelarche, adrenarche followed by menarche.

There are some incomplete variants of PP where only isolated thelarche or adrenarche occurs without any further progression and does not need treatment. Isolated vaginal bleeding without breast development should be evaluated for local causes.

Presentation with thelarche

Thelarche should be differentiated from lipomastia in obese girls. It may be confusing and may need further investigation. Few points favouring CPP-

- 1) Increase in height velocity
- 2) advanced bone age
- 3) pubertal changes in uterus with > than 3 mm endometrial thickness
- 4) baseline 8 am LH > 0.6IU/L and LH to FSH ratio more than 1.
- 5) A thyroid function test is important to rule out hypothyroidism.

Children with Isolated thelarche will have normal growth with prepubertal state on investigation. It is usually seen during two age periods between 2 - 4 years and another at 6 years of age. If the findings are inconclusive GnRH stimulation test is advisable to confirm the diagnosis.

Case Study

A 7 and 1/2 year old girl presented with progressive thelarche for past 3 months. She did not have any other complaints. She was overweight and height age was 9 1/2 years. Bone age was about 9 years. Her ultrasound abdomen showed tubular uterus with thin endometrium as in prepubertal stage. Her Baseline LH was 0.5 IU/L and FSH levels of 3 IU/L. After analysing the history, examination and lab reports, she appeared to be constitutionally tall with prepubertal test results, but due to the progressive nature of breast development, leuprolide stimulation test was considered which showed stimulated values of LH > 20 IU/L (>4-5 IU/L is pubertal). She was given GnRH analogues till the age of 11yrs, and she is doing well.

Another girl of the same age had breast development stage II which never progressed but her baseline LH was 0.6IU/L (borderline report). Her stimulation test revealed prepubertal state, and so she was observed 3 monthly for any signs of progression and later did not require any medications.

Clinical, lab and radiological findings may not corroborate all the time, so follow up is needed to intervene early when necessary for normal physical and psychological growth.

Presentation with Adrenarche/pubarche

This could be an isolated finding with no pathological cause but non classical form of CAH needs to be ruled out. Early pubarche with growth acceleration, enlarged clitoris are clues to virilising form of late onset CAH. ACTH stimulation test would help in diagnosis.

Dihydroepiandrosterone (DHEAS) and Testosterone levels are helpful to differentiate CAH, adrenal or ovarian tumours or isolated premature pubarche.

Presentation with Menarche

It may occur due to transient rise in ovarian activity. Isolated vaginal bleeding without breast development is unlikely to have an endocrine cause. It is important to rule out local causes like trauma, tumour, abuse, foreign body etc.

CONCLUSION

Sexual Maturity Rate scoring should be a part of routine examination when children come with other ailments to identify early maturation. Parents sometimes hesitate to bring up the issue and the initiative taken by the doctor may motivate them to go ahead with further investigations and management.

Dr Suman Rath

Consultant Pediatric Endocrinologist

Bangalore Baptist hospital

CONGRATULATIONS!!



**Dr. G. V. Basavaraj has been elected as Hon. Secretary
General of CIAP**

CONGRATULATIONS TO ALL THE CENTRAL EB MEMBERS

**Dr Subramanya N. K.
Dr Rajkumar Marol
Dr Geeta Patil
Dr Raghunath**

CONGRATULATIONS TO ALL THE FIAP AWARDEES

**Dr Shanthraj
Dr Naveen Benakappa
Dr Sumitha Nayak
Dr Vijay Kulkarni
Dr Prashanth S. N.**

ANNOUNCEMENTS

We are delighted to announce the winners of the **1st PEDITALENT Competition 2019.**

- 1. Dr Rekha Hariram - English Short Story**
- 2. Dr Femine Rajiah - English Poetry**
- 3. Dr Mridula A. M. - English Travelogue**
- 4. Dr Nityananda S. K. - Kannada Poetry**
- 5. Dr Rangaswamy K. B. - Kannada Short Story**

Hearty congratulations to all the winners!

We look forward to more creativity in the days ahead.

PHOTO GALLERY



Inauguration of IAP Neocon



Rational Antibiotic Day celebration at Vani Vilas hospital



Winners of National Pediatric Quiz held in association with Cobalt sky / Panacea



State IMA conference Oration delivered by Dr Vimochana



Dr Nisarga being felicitated at State IMA conference



Inauguration of State Level IAP PG Quiz

UPCOMING EVENTS

- **Dr Thimmarayappa Memorial Award for Private Practitioners**
Prof. Jayaram Memorial Award for the Best PG Research Paper
Annual General Body Meeting
 Date: November 10, 2019, Venue: IMA Hall, Bangalore
- **Workshop on Vit D deficiency, CIAP program**
 Date: November 17, 2019
- **Valedictory Program**
 Date: December 22, 2019, Venue: Hotel Capitol